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OF THE

FORTY-FIRST SESSION

OF THE

AMERICAN INSTITUTE OF HOMŒOPATHY,

Forty-fifth Anniversary.

HELD AT NIAGARA FALLS, N. Y., JUNE 25, 26, 27, 28 AND 29, 1888.

Instituted April 10th, 1844.

EDITED BY THE GENERAL SECRETARY, PEMBERTON DUDLEY, M.D.

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To the American Institute of Homœopathy:

The volume of Transactions for the Forty-fifth year of the Institute is herewith respectfully submitted. It includes every paper presented at the session held in June, 1888 (except three which failed to reach the General Secretary), and also a paper contained in the Report on Pharmacy presented at the Session of 1887.

Committee of Publication:
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T. M. Strong, M.D., . New York, N. Y.

Anatomy, Physiology, and Pathology.

Special Subject—Not announced.

W. C. GOODNO, M.D., *Chairman*, ... Philadelphia, Pa.

A. R. Thomas, M.D., . Philadelphia, Pa.
R. C. Olin, M.D., ... Detroit, Mich.
Leila G. Bedell, M.D., . . . Chicago, Ill.
J. Edwards Smith, M.D., . Cleveland, O.
W. H. Dickinson, M.D., DesMoines, Ia.
W. E. Greene, M.D., Little Rock, Ark.
Geo. M. Dillow, M.D., New York, N. Y.
Horace Packard, M.D., . Boston, Mass.
Pemberton Dudley, M.D., ... Philadelphia, Pa.

Psychological Medicine.

Special Subject—"Agents in the Causation and Development of Will Power."

F. W. BOYER, M.D., *Chairman*, ... Pottsville, Pa.
E. O. KINNE, M.D., *Secretary*, ... Syracuse, N. Y.

S. H. Talcott, M.D., . Middletown, N. Y.
W. H. Holcombe, M.D., New Orleans, La.
J. D. Buck, M.D., ... Cincinnati, O.
N. E. Paine, M.D., . . . Westboro, Mass.
A. P. Williamson, M.D., Middletown, N. Y.
J. G. Baldwin, M.D., New York, N. Y.
M. W. Butler, M.D., . . Brooklyn, N. Y.
E. D. Jones, M.D., ... Albany, N. Y.

Ophthalmology, Otology and Laryngology.

Special Subjects—1. "Affections of the Ocular Muscles." 2. "Consequences of Chronic Suppuration of the Middle Ear." 3. "Atrophic and Hypertrophic Nasal Catarrh."

CHARLES DEADY, M.D., *Chairman*, ... New York, N. Y.

J. A. Campbell, M.D., . . St. Louis, Mo.
F. Park Lewis, M.D., . . Buffalo, N. Y.
H. H. Crippin, M.D., . . San Diego, Cal.
E. W. Beebe, M.D., . . Milwaukee, Wis.
J. H. Buffum, M.D., ... Chicago, Ill.
J. M. Schley, M.D., . . New York, N. Y.
Harold Wilson, M.D., . . Detroit, Mich.
Thos. M. Stewart, M.D., . Cincinnati, O.
F. F. Casseday, M.D., ... Kansas City, Mo.

Organization, Registration and Statistics.

T. F. SMITH, M.D., *Chairman*, ... New York, N. Y.

I. T. Talbot, M.D., ... Boston, Mass.
W. E. Leonard, M.D., Minneapolis, Minn.
H. M. Smith, M.D., . New York, N. Y.
Millie J. Chapman, M.D., Pittsburgh, Pa.
C. E. Fisher, M.D., ... Austin, Texas.

COMMITTEES.

Executive and Publication.

S. H. Talcott, M.D., . Middletown, N. Y.
Theo. Y. Kinne, M.D., . Paterson, N. J.
Pemberton Dudley, M.D., Philada., Pa.
T. M. Strong, M.D., Ward's Island, N. Y.
E. M. Kellogg, M.D., ... New York, N. Y.

Legislation.

A. I. SAWYER, M.D., *Chairman*, ... Monroe, Mich. (1 year).

I. T. Talbot, M.D., Boston, Mass. (2 yrs.).
F. H. Orme, M.D., Atlanta, Ga. (4 yrs.).
H. M. Paine, M.D., Albany, N. Y. (3 yrs.).
J. P. Dake, M.D., Nashville, Tenn (5 yrs.).

Medical Literature.

J. C. BURGHER, M.D., *Chairman*, ... Pittsburgh, Pa.

R. Ludlam, M.D., ... Chicago, Ill.
S. Lilienthal, M.D., . San Francisco, Cal.
H. M. Smith, M.D., . New York, N. Y.
C. H. Hofmann, M.D., . Pittsburgh, Pa.

Foreign Correspondence.

T. M. STRONG, M.D., *Chairman*, ... Ward's Island, N. Y.

Prosper Bender, M.D., . . Boston, Mass.
E. F. Storke, M.D., . . Milwaukee, Wis.
J. K. Warren, M.D., . Worcester, Mass.
W. Y. Cowl, M.D., . . New York, N. Y.

Intercollegiate.

I. T. TALBOT, M.D., *Chairman*, ... Boston, Mass.

This committee consists of two delegates from each college represented in the Institute, and appoints its own chairman.

Pharmacy.

Special Subject—"Iodine and its Salts."

C. L. Cleveland, M.D., . . Cleveland, O.
E. M. Howard, M.D., . . Camden, N. J.
T. F. Allen, M D., . . New York, N. Y.
A. R. Wright, M.D., . . . Buffalo, N. Y.
W. Y. Cowl, M.D., ... New York, N. Y.

Medical Education.

O. S. Runnels, M.D., *Chairman*, ... Indianapolis, Ind.
T. Y. Kinne, M.D., . . . Paterson, N. J.
L. H. Willard, M.D., . . Allegheny, Pa.
D. H. Beckwith, M.D., . . Cleveland, O.
C. B. Kinyon, M.D., . Rock Island, Ill.
R. W. McClelland, M.D., Pittsburgh, Pa.
T. G. Comstock, M.D., . . St. Louis, Mo.

Directors of Provings.

C. Wesselhœft, M.D., *Chairman*, Boston, Mass., . Term expires 1889.

L. Sherman, M.D., . . Milwaukee, Wis. Term expires 1890.
A. W. Woodward, M.D., . Chicago, Ill. Term expires 1891.
T. F. Allen, M.D., . . New York, N. Y. Term expires 1892.
H. R. Arndt, M.D., Grand Rapids, Mich. Term expires 1893.
Martin Deschere, M.D., New York, N. Y. Term expires 1894.
Chas. Mohr, M.D., . . Philadelphia, Pa. Term expires 1895.

International Homœopathic Congress of 1891.

I. T. Talbot, M.D., *Chairman*, ... Boston, Mass.
J. W. Dowling, M.D., . New York, N. Y.
B. W. James, M.D., . Philadelphia, Pa.
R. Ludlam, M.D., ... Chicago, Ill.
O. S. Runnels, M.D., Indianapolis, Ind.
J. P. Dake, M.D., . . . Nashville, Tenn.
T. G. Comstock, M.D., . . St. Louis, Mo.
F. H. Orme, M.D., ... Atlanta, Ga.

Organization of Provers' Clubs.

C. L. Cleveland, M.D., . . Cleveland, O.
J. Heber Smith, M.D., . . Boston, Mass.
C. Wesselhœft, M.D., . . . Boston, Mass.
D.H.McLachlin, M.D., Ann Arbor, Mich.
A. C. Cowperthwaite, M.D., ... Iowa City, Ia.

Programme and Business.

I. T. Talbot, M.D., *Chairman*, ... Boston, Mass.
T. Y. Kinne, M.D., . . . Paterson, N. J.
A. R. Wright, M.D., . . . Buffalo, N. Y.
Pemberton Dudley, M.D., . Philada., Pa.
W.H.Leonard, M.D., Minneapolis, Minn.

Local Arrangements.

W. H. Leonard, M.D., *Chairman*, ... Minneapolis, Minn.
C. G. Higbee, M.D., . . . St. Paul, Minn.
A. H. Felch, M.D., . Minneapolis, Minn.
G. F. Roberts, M.D., Minneapolis, Minn.
D. W. Horning, M.D., Lake City, Minn.
L. G. Wilberton, M.D., . Winona, Minn.
Chas. Griswold, M.D., . St. Paul, Minn.
A. M. Eastman, M.D., . St. Paul, Minn.
G. Tucker, M.D., . . . Northfield, Minn.

Railroad Fares.

H. C. Allen, M.D., *Chairman*, ... Ann Arbor, Mich.
I. T. Talbot, M.D., ... Boston, Mass.
B. W. James, M.D., . Philadelphia, Pa.
W. T. Helmuth, M.D., New York, N. Y.
S. B. Parsons, M.D., . . . St. Louis, Mo.

Memorial of the W. C. T. U.

R. Ludlam, M.D., *Chairman*, ... Chicago, Ill.
J. B. Wood, M.D., . . West Chester, Pa.
J. P. Dake, M.D., . . . Nashville, Tenn.

MINUTES

OF THE

FORTY-FIRST SESSION

(FORTY-FIFTH ANNIVERSARY)

OF THE

American Institute of Homœopathy,

HELD AT

NIAGARA FALLS, N. Y.,

JUNE 25 TO 29, 1888.

FIRST DAY—EVENING SESSION.

MONDAY, June 25th, 1888.

THE American Institute of Homœopathy assembled in its forty-first annual session in the Orpheus Park Theatre, Niagara Falls, N. Y., on Monday evening, June 25th, 1888. The stage had been decorated with tropical plants and flowers with exquisite taste by Mrs. Dr. A. C. Cowperthwaite, of Iowa City, Ia., Mrs. Dr. E. Melville Howard, of Camden, N. J., Mrs. Dr. Z. T. Miller, of Pittsburgh, Pa., and Mrs. Dr. C. S. Hoag, of Bridgeport, Conn. Upon the platform were seated the officers of the Institute, together with ex-Presidents J. P. Dake, M.D., Henry D. Paine, M.D., R. Ludlam, M.D., D. H. Beckwith, M.D., I. T. Talbot, M.D., J. C. Burgher, M.D., C. Wesselhoeft, M.D., J. W. Dowling, M.D., B. W. James, M.D., O. S. Runnels, M.D., and F. H. Orme, M.D.

At ten minutes past eight o'clock the convention was called to order by A. C. Cowperthwaite, M.D., LL.D., of Iowa City, Ia., President of the Institute. An invocation was offered by Rev. George F. Rosenmuller, rector of St. Peter's Church, of Niagara Falls.

President Cowperthwaite then delivered, as follows, his

ANNUAL ADDRESS.

Members of the American Institute of Homœopathy—Ladies and Gentlemen:

The inexorable clock of time has tallied off the fleeting moments of another year, and again we are assembled for social converse to recount the experiences of the past, and from these to evolve material for the future advancement and prosperity of our loved profession.

The privilege of renewing old friendships and of forming new acquaintances afforded by our annual reunion is a great pleasure, and is also a veritable duty essential to professional success and prosperity. This fact is only recognized by those whose lives reach out beyond the narrow confines of the little world in which they daily move, and who realize that generous hearts, and broad, enlightened minds

are only cultivated by contact with others who, like themselves, are unselfishly devoting their lives to the good of suffering humanity, and who are continually aspiring to still higher aims and more noble purposes in their profession.

The joy of such a reunion might well be unalloyed, but unfortunately the shadow of the great destroyer each year darkens our threshold, and at the outset we are required to pause and pay a passing tribute to those whose familiar faces we will see no more, whose hands we will never again grasp at these reunions, whose voices never more will be heard in our discussions. Farewell to those

"Against whose names the asterisk of death is set."

Their life-works of unselfish benevolence are ended and they are at rest. How sweet the memory of the beloved physician who, though resting from his labors, his works follow him to comfort and bless his fellow man. This is no sentiment, but a precious truth which should be enshrined in every heart, easing its burdens, gladdening its pathway through life, and finally opening to it the gates of immortality.

Those who will lie down in their last sleep the coming year none can tell. Then

"So live, that when thy summons comes to join
The innumerable caravan that moves
To the pale realms of shade, where each shall take
His chamber in the silent halls of death,
Thou go not like the quarry-slave at night,
Scourged to his dungeon, but sustained and soothed
By an unfaltering trust, approach thy grave
Like one who wraps the drapery of his couch
About him and lies down to pleasant dreams."

Stern realities of the present now demand our attention and energies. All about us are the evidences of the utilitarian age of progress in which we live. The torch of science is illuminating the darkest corners of the earth and bringing to light and utilizing to our good, truths which have existed from creation's earliest dawn, yet until now hidden from our view. The shadows of the mysterious and incomprehensible are fast disappearing, yet revolutions in science continue with such startling rapidity, it would seem as if they had but just begun. Yet, as a recent author says, "In the pride of our hearts we forget how very young science is. We forget how new a power it is in the world, and how feeble and timid was its tender babyhood in the first two decades of the present century. Among the concrete sciences, astronomy, the oldest born, had advanced

furthest when our age was still young. But geology had only just begun to emerge from the earliest plane of puerile hypothesis into the period of collection and collocation of facts. Biology, hardly yet known by any better or truer name than natural history, consisted mainly of a jumble of half-classified details. Psychology still wandered disconsolate in the misty domain of the abstract metaphysician. The sciences of man, of language, of society, of religion, had not even begun to exist. The antiquity of our race, the natural genesis of arts and knowledge, and the origin of articulate speech or religious ideas were scarcely so much as debatable questions. Among sciences of the abstract-concrete class, physics, unilluminated by the clear light of correlation and conservation of energy, embraced a wide and ill-digested mass of separate and wholly unconnected departments. Light had little enough to do with heat, and nothing at all to do in any way with electricity, or sound, or motion, or magnetism. Chemistry still remained very much in the condition of Mrs. Jellaby's cupboard. Everywhere science was tentative and invertebrate, feeling its way on earth with hesitating steps, trying its wings in air with tremulous fear, in preparation for the broader excursions and wider flights of the last three adventurous decades."

Without stopping here to note the directions in which science has made its most wonderful advancements, and which are too familiar to the educated mind to require repetition, I will only ask, has the science of medicine, so-called, kept pace with the progress of the times? Perhaps this question can be no better answered than by glancing at the doings of the International Medical Congress—the most noted event in the medical history of the year. There were gathered together the greatest minds of the great medical profession which has assumed for itself the title of "regular" notwithstanding its notoriously irregular methods and practices—and which with pompous pride traces its pedigree back to Hippocrates, a pedigree as unique and canonical as the apostolic succession of the Church of Rome. To such a gathering, which included distinguished representatives from nearly every civilized nation of the globe, may we fairly look for those evidences of progress which would indicate that the science of medicine is keeping pace with those sciences which are in a measure auxiliary to it.

As we diligently search the record of proceedings of this remarkable body we fail to find that which we seek. True, the evidences of progress in the domain of biology, physiology, pathology, and etiology are abundant, which, together with surgery and obstetrics, seem to be obtaining a much greater degree of perfection. But these do not constitute the science of medicine. They may form the foundation, as it is claimed, but, even so, without the superstructure their build-

ing is in vain. Yet even this is not the case, for these sciences cannot constitute the science of medicine unless built upon the broad and solid foundation of an unchanging and imperishable materia medica and therapeutics. They are only to be likened to the house built upon the sand, which fell when the wind and waves beat against it—not because the house itself was not secure, but because it was built upon a false and ever-shifting foundation.

The records of the International Medical Congress are filled with the results of more or less valuable experiments and discoveries in the realms of the various sciences auxiliary to medicine, as medicine itself—that is, materia medica and therapeutics—fills but a small niche in its literature. Thus it was a century ago when Hahnemann first began to be dissatisfied with the then dominant therapeutics. As one of his followers said: "The progress in this direction was nothing but a simple to-and-fro motion. The auxiliary sciences—anatomy, physiology, chemistry, etc.—made actual progress until they finally took rank as real sciences, leaving therapeutics and its attendant materia medica behind in the dark to scrabble on as best they might."

A century has not added wisdom to the dominant school of medicine, and the words written three-fourths of a century ago may be repeated with equal truthfulness to-day. Materia medica and therapeutics—the real essentials of medical science—are struggling along in the rear, vainly endeavoring to keep within sight of that which they should precede. The proceedings of the International Medical Congress show beyond contradiction that these men are still pursuing an ever-distant *ignis fatuus*, as did their fathers a century, yes, many centuries ago. They are searching for the nature and cause of disease, with the supposition that this once found they may build upon it a system of therapeutics with fixed and immutable laws. How futile this search has been in the past, history teaches; how much may be expected from it in the future can only be judged by the history of the past.

The International Medical Congress practically accepted the theory of the bacterial origin of disease without opposition. That is the popular theory of to-day, but what will it be to-morrow? Alas! none can tell, but it may not be dangerous for me to predict in a gathering of the supposed followers of Hahnemann, that long before our old-school friends shall have formulated and adopted a successful system of therapeutics based upon this now popular theory, the theory itself will have been greatly modified and given the comparatively unimportant place in disease etiology which time will have shown that it deserves.

From the evidences before us we are forced to conclude that however great is the progress being made by the dominant school of

medicine in the auxiliary sciences, its therapeutics is still straggling along in the dark, guided only by the occasional gleams of light that pierce its solitude as they are reflected from the uprising sun of the law *similia similibus curantur*, which is fast reaching its zenith, and must sooner or later shed its benignant rays upon even the darkest and most hidden spot in old-school medicine.

What cares the homœopathist from the standpoint of a therapeutist as to the result of this constant search after the nature and causes of disease? As a scientist he is interested in acquiring all the knowledge possible; but while such investigations are going on he calmly pursues his way as a physician and prescribes his medicines upon the same unchanging law of cure, regardless as to whether micro-organisms are the cause or the result of the disease which he is treating. The words of Dr. Hayward before the British Homœopathic Congress in 1881 are worthy of repetition. After an exhaustive review of the germ-theories and their relation to therapeutics, he closes in these words:

"How complete and perfect, then, and how simple withal, is the science of therapeutics under the rule of similars. The practical application of it may, indeed, often be unsuccessful, because it is in the hands of fallible human instruments; but the science itself is as perfect as the provisions of nature usually are. Pathology and diagnosis being imperfect and frequently unable to interpret the true nature of disease, the treatment based on them frequently fails, and is disastrous; but by a faithful narration by the invalid of his sufferings to an observant and educated physician, and the selection of the true simile, a cure may frequently be brought about *tuto, cito, et jucundo*, whether the pathology and diagnosis be true or not. What an elevated position of superiority then, is occupied by the physician who practices homœopathically. Unlike his colleague of the physiological school, whose treatment is based upon the pathological speculation of the day, to the homœopathic physician, whether the germ-theory or any other theory be true or false, and whether the germs are vegetable spores or animal bioplasts, are matters of little moment. He can go on relieving suffering, curing disease, and shortening convalescence all the same. What a blessing to mankind, and what a privilege and honor to himself. Let the homœopathic physician, then, go on his way rejoicing, and let him thank God that, though a martyr to professional prejudice, he is a conscientious, scientific physician and a benefactor to his race."

The members of the International Medical Congress showed in several instances one of the necessary results of their ignorance of drug action—a tendency toward a lessening of their faith in the power of drugs to cure disease and an increasing confidence in the

vis medicatrix naturæ. This is not to be wondered at when we realize that the mortality of most diseases is greater under allopathic treatment than if left alone with nature. Dr. Arnold made the following statement:

"Those who advocate active treatment ought to review the history of the treatment of pneumonia. The superiority of non-interference over active measures allowed this disease to make the fortune of homœopathy."

Thus it is admitted that active allopathic treatment, although eminently scientific, and based on a pedigree almost as old as the everlasting hills, is nevertheless worse than nothing. But as one writer truthfully says:

"Dr. Arnold has his lesson only half learned. If he will review the history of the treatment of pneumonia he will find, according to the records of Henderson, Tessier, and Dietl, that the mortality was, under allopathic treatment, 20.5 per cent.; non-interference, 7.4 per cent.; homœopathic treatment, 6.0 per cent.

"Thus the allopathic treatment killed 13 patients in the 100, while the homœopathic saved one which was lost under non-interference.

"But this is not all. According to the same record the duration of the disease was, under allopathic treatment, 31 days; non-interference, 28 days; homœopathic treatment, 12 days.

"Thus, under homœopathic treatment, on an average the patients who recovered did so 19 days earlier than they would under venesection and tartar emetic, and 16 days earlier than under non-interference."

Other statistics, the reliability of which could not be questioned, might easily be given, showing that a similar ratio of mortality and duration of disease exists between the two methods of practice in all acute diseases, and that mortality is greater under allopathic treatment than when diseases are left alone to the efforts of nature. It is not surprising that the old school, determined not to profit by the lesson which such statistics teach, should challenge their authenticity and deny their truthfulness. In the "Address on Medicine," delivered at the recent meeting of the American Medical Association by Dr. Roberts Bartholow, that gentleman, after abusing the press for its "flippant" attitude toward the medical profession, proceeds to berate homœopathic practitioners for publishing statistics which he claims are "fictitious," and which, he says, have "placed legitimate medicine in a false position, and discredited its practice to a most serious extent." He then refers to a certain pamphlet written by a physician "who had been a professor in the faculty of Iowa University," which contains "the usual tirade against allopathy, its past

errors and its present uncertainties," but according to Dr. Bartholow, "its really effective part consisted in statistics made up out of whole cloth." I have never seen this remarkable pamphlet, nor am I prepared to deny that it contained false statistics. I desire, however, in justice to the State University of Iowa to make the statement that the gentleman mentioned was once a student in that institution, and for one year held a nominal position as assistant to one of the professors, but he was never professor, and such a claim was entirely fraudulent. If, therefore, he would assume a fraudulent title for trade purposes, it is not unlikely that he might for the same purposes manufacture false statistics. If he did do so, as Dr. Bartholow's investigation would seem to prove, it is no fault of the homœopathic profession at large, and only goes to show the gentleman's ignorance of facts, as he could have readily procured authentic and reliable statistics to have proven his point, namely, the superiority of homœopathic over allopathic therapeutics. Even Dr. Bartholow cannot deny the comparative results of the two methods of treatment as set forth in the respective reports of the Middletown Insane Asylum and the Cook County Hospital, and the fact exists that an opportunity for honestly comparing the results of homœopathic treatment with those of legitimate medicine—that means medicine with a pedigree—has never yet occurred but that the figures have been overwhelmingly in favor of homœopathy. A somewhat ludicrous statement is made by Dr. Bartholow to the effect that in "a considerable town" in the West, the pamphlet referred to "was sent to every householder" and that as a consequence "legitimate practice was in a short time completely destroyed and every regular physician reduced to extremity." How lamentable such a state of affairs, yet when we consider that "regular physicians," so-called, have only succeeded in increasing mortality in disease is it not in the interest of suffering humanity "a consummation devoutly to be wished"?

A condition of things similar to those I have mentioned prevailed a century ago when Hahnemann made his appearance in the medical world, and with this knowledge before us we cannot be surprised to hear him relate his experience, on leaving the ranks of the old school, in a letter to Hufeland in these words: "It was painful for me to grope in the dark, guided only by books in the treatment of the sick, to prescribe according to this or that fanciful view of the nature of disease, substances that only owed to mere opinion their place in the materia medica. I had conscientious scruples about treating unknown morbid states in my suffering fellow-creatures with these unknown medicines, which being powerful substances, may, if not exactly suitable, easily change life into death, or produce new affections and chronic ailments more difficult to remove than the original disease.

To become in this way a murderer, or aggravator of the sufferings of my brethren, was to me a fearful thought."

Thus it was the imperfections of the materia medica, and consequently of therapeutics, that caused Hahnemann to cast about him for something more reliable, and finally led him to the fountain of truth. These imperfections were due, as we have seen, to the fact that the profession then as now were neglecting materia medica and therapeutics in order to bend their energies in searching for the nature and causes of disease, which even the present century with all its wonderful advantages has yet failed to discover.

Members of the American Institute of Homœopathy; is it not our duty to take warning from the errors and follies of the old school? Shall we, too, incline to follow the same beaten path they have trodden, or shall we realize that with homœopathy, the materia medica is the basis of all our action, that therapeutics is the distinguishing feature of our system, and bend all our energies for its improvement and promotion, making the collateral branches of medicine secondary thereto?

A private letter just received from the chairman of the Bureau of Materia Medica contains these words: "It is very discouraging to find so few men willing to work on clinical medicine, therapeutics and materia medica."

As I contemplate the attitude of some members of our profession, I fear that there is a growing disposition to neglect the essential features of homœopathy and, with scalpel and microscope in hand, to follow close in the rear of the old school, searching for the nature and causes of disease. I would not for a moment discourage scientific investigation in every department pertaining to medicine, but I would make that entirely secondary to the development and perfecting of our materia medica, without which we might as well surrender our distinctive title, and allow to perish all the principles and truths which Hahnemann and his followers have cherished, and which have brought so much of health and happiness to the world.

Is there not danger that under the influence of this investigating spirit we may lose sight of some of the cardinal doctrines of homœopathy which, cavil as we may, are essential to the successful application of the law of cure? Just so far as this is true just so far are we departing from the true science of therapeutics, and are losing our identity as homœopathic physicians, no matter how tenaciously we may cling to the name. Already the note of warning is being sounded by those of our members who rebel against this neglect of the distinctive essentials of homœopathy. Just as I pen these lines there is placed before me the last issue of one of our leading journals in which appears an article penned by one of our own members—one

who is deserving of our esteem and confidence, and who represents a very considerable element in our school who are dissatified with the very methods of which I have been speaking. He says:

"In the work of the American Institute of Homœopathy—which although a National Society in name and membership, from its numbers and formative power over medical opinion within the school, may be considered as international in influence—under the leadership of the majority has been from year to year growing more pronounced in its advocacy of the therapeutic opinions held by the pathological wing, and more and more intolerant of ideas held and advocated in opposition to such opinions. For this cause the majority of its members have grown to take more and more interest in pathology (as must naturally have been the case, not only because this branch of medical study is of great interest and importance of itself, but also because it is by them made the basis for the most important of all branches of medical research, therapeutics), and the development, advancement, and promulgation of the peculiar tenets which divide it from other bodies of medical practitioners, have been more and more neglected.

"Year after year good and efficient work has been accomplished in all branches of medical labor except in therapeutics and materia medica, while the bureau to which were referred these subjects—subjects which would seem the peculiar business of this society—have been granted less and less of the Institute's time, and their contributions have grown proportionately more and more meagre; years have been devoted to the consideration of plans for simplifying, condensing, and abbreviating the materia medica, while amplifying, proving, and verifying have been neglected.

"The surgeon and sanitarian, the pathologist, the obstetrician, and the pharmacist have been accorded full hearing and respectful and helpful attention, while the materia medica and therapeutist especially in so far as they ventured to differ from the opinions of the majority, have received but scant courtesy."

Seriously, my brethren, is there not too much room for this criticism, and is it not time for us once more to appreciate the fact that it is the duty of this great organization to lend its influence to the propagation of the essential truths of homœopathy, those truths which have made homœopathy an accepted power in the medical world, leaving the collateral branches for secondary consideration?

Again, since the days of that notable abortion, "the Milwaukee Test," there has been a disposition on the part of some to spend their time in searching for and publishing to the world alleged discrepancies in homœopathic pharmacology. The microscope is brought to bear upon our drugs and the vehicles in which they are prepared, and

the world is informed that the former do not exist beyond the limit of certain attenuations, and that the latter are possessed of impurities which may more than overbalance and destroy the infinitesimal quantities of the material drug which they are said to contain. May the oft-invoked shades of Hahnemann rest upon us, that now, after three-fourths of a century of the successful use of these very attenuations, prepared in precisely the same character of medium, that wonderful little instrument called the microscope should discover for us that we have been deceived, and that the preparations which have performed such wonders for us at the bedside were nothing, or at least anything except what we supposed them to be. Can we expect anything else than righteous criticism from the old school when they are permitted to quote such arguments against us from those of our own household? How soon will we learn that drug-power in disease is not to be measured by scruples and drachms, any more than are the imponderable essences of disease itself, and even if they were, has microscopic science reached the limit of its development? Is it not possible that succeeding years will afford inventions that will go still farther in detecting the infinitesimal in nature than has yet been done? Let us bear in mind these questions and forget not the wonderful achievements of homœopathy as proven by clinical rather than microscopical tests.

Let us guard with care the reputation, honor, and integrity of our system of practice. In it we thoroughly believe and to it we owe our allegiance. Let us be careful then that we do not with scalpel and microscope bring about that for which our enemies have labored in vain for nearly a century.

THE PROGRESS OF HOMŒOPATHY.

The progress of homœopathy during the past year has been all that could have been desired. From every quarter of our own land comes the most cheering intelligence, and from other lands where barriers exist against medical freedom, such as we of this free and enlightened country know nothing of, from these lands comes the welcome news that homœopathy is becoming slowly but surely established in spite of barriers and in spite of a spirit of intolerance and persecution only surpassed by that with which Hahnemann contended in the early days of our system. Especially have our brethren in Great Britain reason to be encouraged. The outcome of the celebrated discussion carried on through the columns of the *London Times* on "Odium Medicum and Homœopathy" is gratifying to every homœopathist. It proves a fact that was long since established, namely, that whenever homœopathy or any of the interests

pertaining to it are brought before the bar of public opinion, it never suffers therefrom, but invariably comes out triumphant. In closing its columns to the discussion the *London Times* administers to the allopaths a stinging and well-deserved rebuke—one which would have been equally appropriate at any time in the history of the past in connection with old-school antagonism towards homœopathy. It says: "It has become a dispute between two systems or schools of medicine. Being only laymen, we are, of course, incompetent to hold a rational opinion upon such a subject, but it was open to us to endeavor to get the controversy conducted in accordance with the general rule that disputants ought to deal with the arguments of their opponents as stated by themselves, not with any loose travesty of these arguments that prejudice or ignorance may suggest. We accordingly took some pains to ascertain and set forth the homœopathic position as stated by homœopaths themselves, and we were afterwards encouraged to believe that we had done so with—for laymen—tolerable exactitude. It ought not to have been necessary, because every orthodox practitioner ought to know the best as well as the worst of homœopathy, and every orthodox controversialist ought to be ready to state his opponent's position accurately and fairly. It was necessary, however, and we did it, but without the slightest effect. Orthodox writers went on through column after column blazing away at what is non-essential, accidental or extrinsic, while the essential points upon which the whole argument turns were left untouched. What disquisitions we have had about decillionths, and how utterly irrelevant they are when homœopaths maintain that dose is a mere affair of experience and that the essence of their system is a rule of drug selection, based upon observation of the effects of drugs upon the healthy body. Their rule may be rotten and worthless, but we can never advance one step towards proof of that fact by losing ourselves in calculations concerning a space that a decillion of grains would occupy."

How familiar has been this style of argument from the beginning! The old school has never been able or willing to meet homœopathy upon the fair ground of open and honest discussion, but has invariably resorted to a travesty of arguments, only such as prejudice, ignorance, or malice might suggest. The *Times* in the same article says:

"So wide is the field over which the discussion has travelled, that it is perhaps necessary to remind the public what the original contention was. It was simply that an odium medicum exists, exactly analogous to the odium theologicum of a less enlightened age, and no whit less capable of blinding men otherwise honest and kind-hearted to the most elementary conceptions of candor and justice. That con-

tention has been proved, not so much by what Lord Grimthorpe has directly advanced, as by the revelations of temper and mental attitude made by those who took up the cudgels on behalf of the orthodox profession. There have been one or two verbal denials of the existence of this odium, always accompanied, however, by an expression of contempt which comes in practice to much the same thing. But the strength of Lord Grimthorpe's case lies in the fact that whole columns have been filled with contentions which have no point of meaning except to justify the hatred that is verbally denied. Homœopaths are fools if they believe and practice what they profess, and knaves if they do not; therefore, we are justified, and indeed, bound, by the lofty considerations which alone influence professional action, to hate and despise them in either case—is a fair and accurate summary of the attitude assumed by orthodox champions at the opening of the discussion, and maintained with unswerving consistency up to the present moment. But that is the precise attitude which Lord Grimthorpe intended to describe by the phrase odium medicum, and, therefore, out of all the confused discursiveness of the controversy emerges the fact that he has amply justified his main and original statement."

With this conclusion every candid mind must agree, and doubtless from the results of this contest great good will come to the cause of homœopathy in Great Britain.

Many evidences are afforded in the history of the past year of the growth of homœopathy in this country, and the hold that it is obtaining in the hearts of the best citizens of the land—the wealthy and intelligent of every community. Notwithstanding this fact, that is evident to the most casual observer, we still hear the same cry resounding from the lips of the old school that homœopathy is dying out. Dr. Oliver Wendell Holmes gave rise to this chapter of long-continued fiction nearly a third of a century ago, and it has been kept up by less able imitators to the present time. It is said that Dr. Holmes still adheres to the statement made so many years ago, and that, too, notwithstanding he cannot have helped observing the unparalleled advancement of homœopathy during all this period of time. At the time Dr. Holmes made this statement there was not a single homœopathic college in existence. Now there are 14, with about 1200 matriculates annually and over 400 graduates, their alumni already numbering over 8000. At that time there were but a few hundred practitioners in this country—now there are nearly 12,000. Then there were no homœopathic hospitals, now there are 60 with nearly 5000 beds. Then we had but one or two journals devoted to the interests of homœopathy—now we have 25. Then we had but half a dozen societies, including the American Institute of

Homœopathy, which had been recently organized—now we have over 150 societies. Then only one or two small pharmacies were required to supply the demands of the profession—now there are 33 strictly homœopathic pharmacies, some of them doing an immense business, while thousands of drug stores have miniature homœopathic pharmacies established in connection with their regular business—and I must say, in my own opinion much to the injury of homœopathy.

Figures like these might be multiplied in every direction, showing the growth and development of homœopathy since Dr. Holmes proclaimed it dead. No doubt "the wish was father to the thought," which is unquestionably equally true to-day. Similar statements announcing the decline of homœopathy or predicting its speedy death, are frequently seen in the columns of old-school journals, and the same was again publicly announced at the recent meeting of the American Medical Association by Dr. Bartholow in his address before that body, already mentioned. He says, "homœopathy has practically died out on the Continent. On this side of the ocean it still maintains a certain influence, because of social conditions and prejudices that are only possible in free communities." In the first place homœopathy was never before in as healthy and prosperous a condition upon the Continent as it is to-day, and doubtless the results of the recent discussion already referred to will give still greater impetus for the future. Dr. Bartholow admits the "influence" of homœopathy on this side of the ocean, and refers to the fact that this is a free country. Yes, this is a free country, where intolerance and bigotry cannot be made to prevail by methods of persecution and oppression. Here all men are created free and equal, and are guaranteed civil and religious liberty. Here neither the "Odium theologicum" nor the "Odium medicum" have any terrors, for, much as Dr. Bartholow and his associates may regret it, they can call to their aid neither the lash of the law nor the fagot of persecution to enforce their doctrines or to destroy the inalienable right of personal liberty possessed by every sovereign citizen of the American Republic. No, homœopathy is not dead, but is alive and continually growing in power and influence. Even the old school are gradually adopting its truths, and Dr. Bartholow himself surreptitiously appropriates material from homœopathic sources for the purpose of compiling a creditable work on materia medica and therapeutics, and without which his labors would have been in vain. May God speed the day when the already well-worn and tottering edifice of allopathic therapeutics shall have crumbled to the dust, and we permitted to build upon its ruins a temple of increasing solidity and grandeur, whose foundation shall rest upon the eternal and immutable

laws of nature, while the topmost stone shall reflect from the sun of science its beams of truth and mercy upon a grateful world.

MEDICAL EDUCATION.

The question of advancing the standard of medical education in this country has for several years attracted the attention of the profession, though but little has been accomplished farther than in inaugurating a healthy sentiment upon the subject. The great need of reform in this direction is too apparent to require argument. The low standard of requirements for the degree of Doctor of Medicine tolerated in this country is a disgrace to the people as well as to the profession. If the necessities of a new country ever demanded such a farcical system of medical education, such a condition of things certainly does not exist at the present time and never will again. The physician of to-day knows full well how impossible it is to acquire anything more than the merest smattering of a medical education in the short time required by most medical colleges. It is a duty, therefore, that we owe to ourselves as well as to the country, to use all our efforts to advance the standard of medical education, and thus make the diplomas of an American college equal to those of any other country in the world. This matter cannot be left altogether with the college faculties. While some of these are decidedly in favor of such a reform, and are already doing all in their power to bring it about, others are more interested in securing large classes, and it is through this influence, and in order that other and smaller colleges may compete from this standpoint, requirements are continually kept at the minimum. Already a great deal of time has been practically wasted in discussing this subject; the time has now come for prompt and decisive action. The American Medical Association has already acted, and the American Institute of Homœopathy cannot afford to be behind in the good work. I would, therefore, urgently recommend that at this session a resolution be adopted setting forth that on and after the year 1890 the American Institute of Homœopathy will not recognize the diplomas of any college requiring for graduation less than an attendance upon three courses of lectures of at least six months each. And I would further recommend that the Inter-collegiate Committee of the Institute be requested to hold a special meeting at such a time and place as they may agree upon, not in connection with the meetings of the Institute, at which time they shall formulate and adopt some general and uniform system of medical education more comprehensive and rigid in its character than that now existing, including the following minimum requirements:

(1) A good preliminary education, including some knowledge of the classics.

(2) A four years' course of study.

(3) Attendance upon three full courses of lectures of at least six months each.

The said Committee to report their action to the Institute at its annual meeting in 1889, and after such report has been adopted by the Institute any college that refuses to adopt the same, or, having agreed to adopt it, fails to uniformly adhere to its requirements, to be excluded from the Institute, its diplomas not recognized, and no representation allowed in the Inter-collegiate Committee.

PAPERS AND DISCUSSIONS.

While the general result of the plan of sectional meetings has proven in the main quite satisfactory, and is evidently the only plan that can be successfully carried out in a body of this size and character, nevertheless I feel confident that still farther legislation is required to make the plan entirely satisfactory. I believe that the standing resolution adopted July 1st, 1887, should be supplemented by a resolution to the effect that all papers whose authors are not present shall be read by title and referred, unless their reading is requested by two-thirds of the members present at the sectional meeting at which such papers are presented. Also that a limited amount of time be allowed for the discussion of each paper immediately after it has been read. What we need is fewer papers and more discussions. I believe it would be better could we limit each bureau to one or at most two or three papers. The bureau could decide upon which of its members the duty of preparing papers should devolve, while the remainder of the members of the bureau could come prepared to lead in the discussions.

THE PRESS.

There is no subject upon which I shall take the liberty of making any recommendations in which I have a deeper interest and that I desire to present more earnestly than the subject of the relations of the American Institute of Homœopathy to the secular and medical press. I fear that we have in the past failed to appreciate the influence of the press and the mighty power that it is capable of exercising in behalf of this Institute and the interests here represented.

In the first place I can see no valid argument why the publication of papers should be prohibited before they have appeared in the "Transactions." I cannot see that such publications would in any manner whatever injure the Institute or detract from the value of the "Transactions." But I can see why these papers while they are fresh

ought to be given to the public who, with the profession, are especially and directly interested in the results of so important a gathering as that of the American Institute of Homœopathy. I consider it impossible for us to give the members of the press too wide a liberty in the publication of our proceedings, including the papers which are here presented and discussed. We encourage our members to prepare and present papers, which are of great interest to the profession-at-large, but these papers if published, of which there is no certainty, do not appear until late in the year, by which time they have grown stale and lost much of their interest. I would, therefore, recommend that Section 9 of the By-Laws be amended, striking out the words "which have been previously published, or" as occurring immediately after the word "Transactions," and that the Institute allow the publication of any part or all of the papers and discussions at any time after their presentation, provided that no papers are removed from the custody of the secretary for that purpose. This will permit authors to furnish extra copies of their respective papers for publication outside of the "Transactions" and will in my opinion, result in harm to no one, but much good to the Institute and to the cause of homœopathy in general.

I consider that it is a short-sighted policy on the part of the Institute to neglect making efforts to have its proceedings correctly and systematically reported by the daily press. Provision should be made for giving proper attention to the representatives of the secular press, and every courtesy and facility extended to them within the power of the Institute. I would recommend that the provisional secretary have added to his present duties the responsibility of furnishing a correct report of the proceedings of the Institute to the Associated Press, or that a special officer be appointed or elected for that purpose. Such officer should be not only a member of the Institute but also conversant with the duties of press reporter, and be a practical stenographer. I consider this question one of extremely vital importance. Our present methods may have been sufficient in the early days of the Institute, before the press had attained its present position of power and influence and when weekly papers reaching their destination in three or four weeks were all that was expected, and when stage coaches constituted the sole means of rapid communication; but they are not sufficient in these days of telegraphs and rapid transit. If we would keep up with the progress of the age and the spirit of the times we must call the power of the press into requisition to aid us in so doing.

PRESIDENT'S ADDRESS.

Article 3, Section 1 of the By-Laws makes it the duty of the President to "deliver an address at the opening of each session, embodying

a resume of the progress of homœopathy during the year past and make such suggestions as he may deem necessary for the Institute to take action on during the session." The language of this By-Law does not positively preclude the introduction of other subjects into the President's address, but simply requires that the subjects mentioned be included. Nevertheless, it is well understood by the Institute that the intention of this By-Law is to restrict the President's address to these subjects. On behalf of my successors in office I desire to enter a protest against this ruling. While it is eminently proper that the President should each year include in his address a resumé of the progress of homœopathy during the year past, it is nevertheless an injustice to him that he should be restricted to a subject which, however important and interesting, is necessarily limited, and which when drawn out to a respectable length by quotations from statistics, and by other devices, is from a literary standpoint at least, no credit to the President, who is usually supposed to be a man competent to prepare an address that from any standpoint would be a credit to himself and the Institute. I would recommend that the above By-Law be so changed as to make it the duty of the President to deliver an address at the opening of each session upon some subject relating to the science and practice of medicine, and which address shall embody a resumé of the progress of homœpathy during the past year and such suggestions as he may deem necessary for the Institute to take action upon during the session.

Fellow-members of the American Institute of Homœopathy, permit me, in closing, to thank you for the honor you have conferred upon me in thus elevating me to the highest office within the gift of the profession. In filling this exalted position, it has been and will continue to be my earnest endeavor to forget self and strive only to subserve the interests of the Institute and the noble cause which it represents. Let us, one and all, remember that however rapid and substantial may have been the growth of homœopathy in the past, that we are now only at the very dawn of its existence and prosperity. It is not for us, but for our children's children and future generations to fully realize the magnitude of the work which we are now carrying forward, and it is only for them to appreciate its full fruition. Our labors are therefore not ended, nor can we hope to lay our armor by so long as medical intolerance and bigotry prevail and prevent the full acceptance of those truths for the promulgation of which we are so earnestly striving. Let us continue to be encouraged in our efforts, since in the pure principles of homœopathy we see the elements of stability and triumph. Already we may descry the fulfilment of that glowing prophecy uttered by the immortal Hahnemann less than half a century ago, when he said, "Our art requires no political lever, no worldly badges

of honor in order to become something. Amid all the rank and unsightly weeds that flourish round about, it grows gradually from a small acorn to a slender tree; already its lofty summit overtops the rank vegetation around it. Only have patience—it strikes its roots deep under ground, gains strength imperceptibly but all the more certainly, and in due time it will grow up a lofty God's oak, stretching its great arms, which no longer heed the storm, far away into all regions of the earth, that mankind, who have hitherto been tormented, shall be refreshed under its beneficent shadows."

The full realization of this prophetic vision depends upon the zeal and wisdom with which we, as followers of Hahnemann, maintain and defend the principles and truths for which he labored and suffered, and which he has bequeathed to us as a rich inheritance.

The Vice-President, N. Schneider, M.D., of Cleveland, O., being in the chair, a committee was, on motion, appointed to consider the subjects treated of in the President's address, and to report to the Institute. The committee was composed of Drs. D. H. Beckwith, of Cleveland, O.; C. Wesselhoeft, of Boston, Mass.; and George F. Roberts, of Minneapolis, Minn.

The President having resumed the chair, the Order of Business prepared by the Executive Committee was adopted.

The Annual Report of the Treasurer, E. M. Kellogg, M.D., of New York City, was presented by that officer, and under the rule was referred to an auditing committee, consisting of Drs. R. Ludlam, of Chicago, Ill.; F. H. Orme, of Atlanta, Ga.; and T. Y. Kinne, of Paterson, N. J. (see Report of the Treasurer).

The General Secretary then read the following

Report of the Executive Committee.

Your Executive Committee respectfully reports, That at the beginning of the current official term communications were received from the Homœopathic Medical Society of St. Paul, Minn., and from the Hahnemannian Medical Society of Hennepin County, Minn., inviting the Institute to hold its present meeting at Lake Minnetonka. The invitations were accompanied by the suggestion that the Executive Committee should order the desired change to be made.

The responsibility thus thrown upon your committee was of so important and delicate a nature, that we were unwilling to assume it in the absence of any actual necessity for the proposed change, unless we could feel reasonably certain of the approval of the general sen-

timent of the Institute. Communication was therefore had with a large number of the Institute members, and while very many of the responses were decidedly in favor of the change, there was not even an approach to unanimity of sentiment. From the East and the West alike there were emphatic expressions both favorable and unfavorable to the project. The President of the Institute visited St. Paul and Minneapolis and conferred freely with the resident homœopathic physicians; the conclusion being reached that neither the best interests of the Institute, nor those of the homœopathic profession in the Northwest would be subserved by setting aside the vote by which Niagara Falls was chosen last year as the place for the present meeting. This view, we may add, was concurred in by the Minnesota physicians themselves. The committee, therefore decided not to authorize the change.

Under the unusual circumstances in which this session was to be held, your committee felt that special efforts were required in order to secure the usual degree of interest. With this necessity in view, the President published, over his own signature, a circular to our Western physicians for the purpose of correcting certain evident misunderstandings respecting the Institute and its policy and work, and also to urge a much larger representation of Western physicians in its membership. There is reason to hope that this action will yield good results.

The announcement of the session was publicly made through the April issues of the homœopathic journals. With the announcement, there was sent to the editor of each journal a request for special editorial notice, urging for the society a more earnest and general support. The journals, almost without exception, responded heartily to the suggestion, and have placed the Institute under obligations. A second notice of the meeting appeared in the June issues.

The Annual Circular, containing the "Order of Business," and the list of papers to be presented at the sectional meetings, was mailed to all the members, and to all outside physicians inquiring for information, as well as to some others whom it was thought might be thus favorably influenced. In addition to these, a four page circular, including a blank application for membership, was distributed broadcast over the country.

The Secretary has succeeded in effecting an arrangement with the Associated Press, by which a daily report of the session will be telegraphed to the newspapers. The preparation of this report has been provided for by the President in the appointment of Dr. Frank Kraft as "Press Reporter" for the session. Dr. Kraft's experience both in medical and newspaper journalism pre-eminently qualifies him to render this important service to the Institute. He will also lend

his assistance in the preparation of special reports for the local newspapers.

The Executive Committee's work has been greatly facilitated by the wisdom and energy displayed by the local Committee of Arrangements, and also by the careful consideration given to the subject of the Bureau Reports by the Committee on Sectional Meetings.

On behalf of the Executive Committee,

A. C. COWPERTHWAIT,
Chairman.

PEMBERTON DUDLEY,
General Secretary.

NIAGARA FALLS, N.Y., June 25, 1888.

The report was accepted and referred to the Committee of Publication.

Dr. J. C. Burgher, of Pittsburgh, Pa., then presented the following:

REPORT OF THE COMMITTEE OF PUBLICATION.

To the President and Members of the Institute:

Your Committee of Publication has the pleasure to report that the TRANSACTIONS of 1887 were issued promptly, in one octavo volume, of 889 pages, substantially bound in muslin, and distributed as follows: To medical journals, colleges, hospitals, and public libraries, 55 copies, and to members of the Institute, 666—total 721 copies.

At the request of the Treasurer, the TRANSACTIONS of previous years were furnished to members as follows: TRANSACTIONS of 1884, 4 copies; of 1885, 30 copies; of 1886, 94 copies—total 128 copies.

Grand total of copies mailed and expressed since our last meeting, 949..

Respectfully submitted,

J. C. BURGHER.

THE REPORT OF THE NECROLOGIST,

Henry D. Paine, M.D., of New York, was read by him, and accepted by the Institute as follows:

"Information of the death of the following members of the Institute has been received since the last meeting. Nearly all here reported have died within that interval; but two or three of those now named departed to their rest at an earlier date, though the fact was not communicated to this department.

Dr. Walter Ward, Mount Holly, N. J.; died March 29, 1888; æt. 72.

Dr. Adolph Lippe, Philadelphia; died Jan. 23, 1888; æt. 76.

Dr. Lorenzo M. Kenyon, Buffalo; died Nov. 25, 1887; æt. 66.

Dr. Henry B. Clarke, New Bedford, Mass.; died March 6, 1888; æt. 61.

Dr. Cornelius Ormes, Jamestown, N. Y.; died April 20, 1886; æt. 81.

Dr. William H. Randel, Albany, N.Y.; died Dec. 14, 1887; æt. 55.

Dr. William P. Gambell, Boston, Mass.; died Dec. 1, 1887; æt. 67.

Dr. Charles A. Walker, Chelsea, Boston; died Oct. 4, 1887; æt. —.

All the above belonged to the class of Seniors. Dr. Ward was present at and assisted in the organization of the Institute, in 1844. Dr. Lippe was also one of the founders, though not present at the first meeting.

Dr. Charles Sumner, Rochester, N. Y.; died May 5, 1888; æt. 64.

Dr. Nathaniel R. Seeley, Elmira, N.Y.; died March 4, 1888; æt. 55.

Dr. Arthur P. Hollett, Havana, N.Y.; died Sept. 29, 1887; æt. 40.

Dr. Horace E. Boardman, Monroe, Wis.; died Feb. 26, 1888; æt. 53.

Dr. Titus L. Brown, Binghamton, N. Y.; died Aug. 18, 1887; æt. 59.

Dr. William M. Zerns, Philadelphia; died Sept. 21, 1887; æt. 35.

Dr. S. Hopkins Keep, Brooklyn, N.Y.; died Oct. 26, 1887; æt. 41.

Dr. Elam C. Knight, Woodbury, Conn.; died Mar. 21, 1888; æt. —.

Dr. Ephraim W. South, Plainfield, N. J.; died April 8, 1888; æt. 53.

Dr. Arthur A. Camp, Minneapolis, Minn.; died April 9, 1888; æt. 33.

Dr. Jason W. Drake, Dover, N. H.; died Nov. 20, 1885; æt. 50.

Biographical sketches of nearly all of these nineteen members, lately deceased, are contained in the full report which will be presented at the Memorial service, on which occasion also, further remarks will be more appropriately offered. (See Memoirs and Memorial Service).

The President re-appointed Dr. Henry D. Paine, of New York, as Necrologist for the ensuing year.

The Report of the Bureau of Organization, Registration and Statistics

Was presented and read by T. Franklin Smith, M.D., of New York, N. Y., Chairman of the Bureau. It was accepted and referred to the Committee of Publication.

The recommendations contained in the report were referred to the

Committee appointed on the President's Address, with instructions to prepare a supplementary report thereon. Following is the text of the Bureau Report:

To the President and Members of the American Institute of Homœopathy:

In looking over our field we are brought to the conclusion that the work which has been accomplished during the past year has been a very satisfactory one.

Our banner, inscribed with "Similia Similibus Curantur," still unfurls its folds to the breeze, and our prayer is "Long may it wave." We would echo the sentiment of Gen. Dix: "If any man attempts to haul down our flag, shoot him on the spot." Some may be inclined to say that this is all mere sentiment and bosh; well, so be it; sentiment or no sentiment, whatever it is, it is very pleasant, and we like it and enjoy it.

Very many of the societies which for several years have been languishing and which, to all appearances, were in a comatose condition, have been revived and put on new life, and are now doing an excellent work; whether this resuscitation has been accomplished by the use of strong tinctures, crude drugs, or the hundred thousandth attenuations, we know not, neither do we care; it is enough for us to be aware of the fact that they have been cured of their lethargy and are at work again in the good cause; of one thing we are confident, that the cure has been produced upon homœopathic principles and in accordance with the law of similia.

Our brethren out in Minnesota, after long years of hard toil and labor have at last been rewarded by seeing their desires granted, and now they have the opportunity of having the doctrines and practice of Hahnemann taught in their State University by an able corps of teachers of their own selection and choice; we are confident they will give a good report of their work there.

The New York Homœopathic Medical College and Hospital are hard at work raising funds for the furtherance of their work of erecting suitable and handsome buildings for their use, such as every friend of homœopathy in the country will be proud of.

We have been pushing, as well as we could, the work of obtaining autobiographical sketches from each one of our members, but not with as good success as we could desire; we have on file 586 of these. For some reason or other, many of our brethren and sisters seem to shrink from writing their own epitaph; whether it is from the same fear that formerly kept one from writing his will, fearing it might

hasten his death, we cannot tell; we are certainly of the opinion that instead of hastening the day of one's demise, it will have a tendency to put it off, from the fact that one's conscience will not be troubled with the thought of that duty being left unperformed; we all know that a good, clear conscience is a very great aid in promoting long life. With some it may be a feeling of modesty which keeps them from granting our requests for their autobiographies; but we beg leave to say to such, if there should be any among our members, that this need not trouble them, because when these sketches are made use of they will be beyond the reach of them.

It may seem to be a very unimportant and trifling thing to ask for these sketches of our lives, but if those of our members who have not complied with our request could realize how much assistance those we have received have been to our Necrologist during the last year in furnishing dates and other items which it would have been very difficult and in some cases, almost impossible to have obtained without these sketches, we think they would hesitate and delay no longer. We trust that during the coming year no member will decline to comply with this request which has been made by the Institute.

Our photographic group is rapidly approaching completion; we were very desirous of having copies of it at the meeting this year to distribute among the members, but we have been delayed so long in consequence of the members failing to furnish us with their pictures, that it has been impossible to do so. We have in all about 575 likenesses in the group. In arranging this large number we found it to be impossible to follow out any particular system of grouping as we would like to have done; but the difference in size, style, etc. of the pictures was so great that we were not able to do so; so we have placed them just where they would appear to the best advantage and for the best general make-up of the entire group. We make this explanation lest any one should feel disposed to criticise or complain that his or her picture is not just where or in such company as they might have wished. We have made such arrangements as will enable us to furnish copies of the picture to any one desiring them at the price of about $2.50, including postage. There will be a key prepared so that it will be a very easy matter to recognize the likeness of any one. We know that there will be considerable disappointment, and in innumerable cases "wailing and gnashing of teeth," because so many of the members will fail to find their pictures among such an uncommonly good looking and handsome lot of men and women; but, fellow-members, you do not have our sympathy, for you do not deserve it; you were pleaded with and coaxed, but all to no purpose; you must now bear your grief alone, without the least commiseration from us; all that we can say is that we are sorry you were so foolish

and hope you will do better next time, profiting by experience. We have been able to obtain the photographs of a majority of our Corresponding and Honorary members, and we would suggest that a copy of the picture be sent to each one of such Corresponding and Honorary members as have furnished their pictures, with the compliments of the Institute and at its expense.

We have pursued the plan adopted a year ago of obtaining from as many of the members as possible their desires in regard to which Bureaus or Committees they desire or are willing to work upon. Every member of the Institute has been corresponded with upon this subject; some of them have paid no attention whatever to our request, but a sufficiently large number have responded to it to make the labor of making up the different Bureaus and Committees in such a manner that no member will be placed upon more than one, excepting, in special cases, a comparatively easy one. We would suggest that in making these up, the chairmen select such members as they may desire to have associated with them, from the lists which have been prepared and which will be placed in their hands. This is but simple courtesy due to those who have shown sufficient interest in the welfare of the Institute and their willingness to do what they can to further its interests, to respond to the requests made to them.

We would say that, in our opinion, much better work would be accomplished by continuing in office for more than one year those chairmen who have done good and efficient work in their respective bureaus. It very often takes more than that length of time to get a bureau into good working order. We would also suggest the plan of placing in the hands of the different chairmen at least three months previous to the meeting of the Institute, the list of those members who have signified a willingness to work, so that they may select those whom they may desire to have associated with them, correspond with and obtain pledges from them that they will perform the duties imposed upon them; by this plan sufficient time and deliberation can be taken in the formation of the bureaus and committees to assure good work, instead of its being done, as it now is, in a hurry and without any opportunity of conference.

The lists are made up as follows, from members who have indicated such bureau or committee as their first choice:

Clinical Medicine and Special Therapeutics has 56 names.
Materia Medica and General Therapeutics has 20 names.
Surgery has 41 names.
Obstetrics has 27 names.
Gynæcology has 33 names.
Pædology has 22 names.
Ophthalmology, Otology, and Laryngology has 21 names.

Sanitary Science has 19 names.
Psychological Medicine has 10 names.
Anatomy, Physiology and Pathology has 5 names.
Drug Provings has 8 names.
Pharmacy has 6 names.
Medical Education has 8 names.
Medical Legislation has 7 names.
Medical Literature has 5 names.
Foreign Correspondence has 5 names.

This shows that 293 of our members have signified their willingness to do all that they can to advance the interests of homœopathy and science in our Institute,—not a very large proportion of our membership, truly.

In accordance with the instructions received from you last year, we have prepared a list containing the name of every one who has ever been a member of the Institute, together with the name of the college from which they graduated, and the date of death of every one who died while a member of the Institute. Quite a large number joined our ranks, but for some reason or other they dropped out and were not members at the time of their death; in such cases we have simply recorded their names and date of election to membership. The labor of compiling this list has been very great, owing to inaccuracies in some of the earlier volumes of the TRANSACTIONS; but we believe that it is as correct as it is possible to make it. It will be a very easy matter to keep it so in the future, by simply adding to it the names of those who are elected each year, and placing opposite to each name the date of death as it may occur. We would recommend that the entire list be printed each year in the TRANSACTIONS, thus enabling us to have constantly before us the names of all who have been connected with us in society relations. The list of Seniors can be published separately and in addition to the regular list, as has been done for several years past.

Our statistical report is as follows: there are on our list 4 National Societies, 2 Sectional or Inter-State Societies, 30 State Societies and 105 Local Societies and Medical Clubs: of all these we have reports from 114, the following Sectional and State Societies have failed to furnish us with any statistics whatever, viz.:

Western Academy of Homœopathy.
Hahnemann Medical Association of Louisiana.
Indiana Institute of Homœopathy.
Homœopathic Medical Society of the State of Michigan.
Texas Homœopathic Medical Association.

There are in the United States 26 General and 31 Special Hospitals, having capacity for 5182 beds. We have received reports from 23

General and 23 Special Hospitals, with capacity for 4769 beds, showing that 29,976 patients have been treated during the past year, of which 19,529 have been cured, 3687 have been relieved, and 915 have died; 6780 are still under treatment. The death rate has been 3.05 per cent, which is exceedingly low when we take into consideration that it has been purely a hospital practice.

The following Hospitals, for some reason or other, have not reported, although they have been requested five or six times to do so.

Hahnemann Hospital of San Francisco.

Homœopathic Hospital of Minneapolis.

Medical, Surgical and Maternity Hospital of the Woman's Homœopathic Association of Penna.

Kansas Surgical Hospital of Topeka.

Consumptives' Home of Boston.

Faxton Hospital of Utica, N. Y.

Boys' Home of Allegheny, Pa.

Home for the Aged Poor of Allegheny, Pa.

St. John's Home of Milwaukee, Wis.

We are very sorry to say that the Medical Board of the Ward's Island Homœopathic Hospital, N. Y. City, at a recent meeting voted to decline to furnish a report from that hospital giving as their reason for such action on their part, that the Institute at its session held at Saratoga last year, grossly insulted its President, Egbert Guernsey, M.D. and its Secretary, Alfred K. Hills, M.D. It was in vain that it was stated to them that the Institute had no intention of insulting them when the motion in regard to the dropping of the *N. Y. Medical Times* from our list of Journals, was passed; that it was not done from any personal feeling against those two gentlemen, one of whom is an esteemed Senior of this Institute, but simply because of the stand they had taken in their journal against homœopathy, and their great desire that our distinctive name should be dropped. It is with feelings of very deep regret that we make this statement. The report of the work done at the Ward's Island Homœopathic Hospital is taken from the *N. A. Journal of Homœopathy* in which it was published. The report of the Good Samaritan Deaconesses of N. Y. City was refused for the same reason.

There are in the United States, so far as we are able to learn, 43 homœopathic dispensaries. We have received reports from 38 of these, showing that 144,443 patients have been treated and 332,956 prescriptions have been made during the year.

We hope to be able to publish in the TRANSACTIONS, reports from each one of these delinquent societies, hospitals and dispensaries. This can very easily be done if those persons having charge of these institutions will but take the slight trouble of furnishing us with the statistics.

We have reports from homœopathic medical colleges, showing that 1215 students have matriculated and 390 have graduated during the past year.

There are twenty homœopathic journals published in the United States.

We desire here to correct a clerical error made in our report of last year, in which we stated that the death-rate in the different hospitals was $1\frac{6}{10}$ per cent, when it should have been stated to be 6.56 per cent. The mistake was not discovered until our attention was called to it after the TRANSACTIONS had been printed, when it was too late to rectify it, so we take this opportunity of doing so.

We again have to complain of the hindrances we have met with in collecting the statistical reports from the different societies and institutions; not only was a very strong appeal made in the first circular we sent out, but several subsequent appeals have been made, as well as a large number of personal letters written, but without any result from a great number. Instead of presenting a complete and full report from every society and institution in the country, there are 30 societies, 11 hospitals and 4 dispensaries from whom it has been impossible, as yet, to obtain any report whatever. This certainly ought not so to be, for there can be no valid excuse for this. Every member of the Institute should feel an equal interest with us in presenting to the world a full report of the work done by the homœopathic profession, and should be willing to aid, to the best of their ability, in the accomplishment of that object. Our Bureau is not working for the interest of its own members, but in the interest and for the sake of our common cause. It is an absolute impossibility to present a complete report unless we have given to us the necessary statistics; these we cannot obtain unless those who have them will provide us with them. It has been our endeavor each year to present a full and complete report, but our desires in that direction have never been realized and we are very much afraid that they never will be. However, a streak of lightning, or something else equally powerful, may some time arouse these tardy brethren from their lethargic state, so that they may realize what their duty is and be willing to perform it.

T. FRANKLIN SMITH, M.D.,
Chairman.

The President reappointed as Chairman of the Bureau of Organization, Registration and Statistics, for the ensuing year, T. Franklin Smith, M.D., of New York, N. Y.

Reports of delegates from various societies and institutions being

next in order, and the hour of adjournment being near, a motion was offered that this item of business be "passed." The motion was adopted.

The President appointed as a member of the Board of Censors Millie J. Chapman, M.D., of Pittsburgh, Pa. to complete a quorum of that board.

Dr. A. R. Wright, of Buffalo, N. Y., Chairman of the Committee of Local Arrangements, presented a verbal report from the Committee. The report was on motion accepted and the Committee continued.

The Institute then, at 10 o'clock, adjourned until 9.30 o'clock on Tuesday morning.

SECOND DAY- MORNING SESSION.

TUESDAY, June 26th, 1888.

THE Institute was called to order at 9.45, the members being late in assembling. President Cowperthwaite in the chair.

The Chairman of the Board of Censors, R. B. Rush, M.D., of Salem, O., reported the names of a number of physicians who had applied for membership in the Institute. These applications were laid over for subsequent action, under the rule.

Dr. H. C. Allen, of Ann Arbor, Mich., Chairman of the Committee on Railroad Fares, reported that he had secured a reduction of about one-third in the rates over nearly all the main lines and branches in the country, for the benefit of those attending the session, and giving explicit directions as to the measures to be taken to secure the benefit of this reduction. The report was accepted.

Dr. H. C. Allen, was reappointed Chairman of the Committtee on Railroad Fares for the ensuing year; Drs. B. W. James, of Philadelphia, Pa., and I. T. Talbot, of Boston Mass., were appointed on the same Committee.

THE REPORT OF THE COMMITTEE ON PHARMACY

Was then presented by Lewis Sherman, M.D., of Milwaukee, Wis., Chairman. The Committee reported a continuance of the experiments begun three years ago and submitted papers entitled:

"On the Cause and Prevention of the Darkening of Milk Sugar during Trituration," by Lewis Sherman, M.D., of Milwaukee, Wis.

"Detailed Supplementary Report of Provings, on the Subject of Pharmacy." by Conrad Wesselhoeft, M.D., of Boston, Mass.

Dr. C. W. Butler, of Montclair, N. J., asked why certain papers presented at the last session by the Committee on Pharmacy had been omitted from the published TRANSACTIONS.

Dr. J. C. Burgher replied that he supposed these papers to contain merely a series of provings of Mercurius solubilis. An examination

showed that they did not contain a single effect not already recorded in the vast symptomatology of that drug. He therefore did not deem it wise to publish them. Some of the papers, moreover, appeared to be anonymous and were therefore returned to the Chairman of the Committee. Since that time he had learned that the experiments recorded in these papers were not intended as mere reprovings of the drug, but were designed to aid in clearing up a question in pharmaceutics. He therefore regretted that his misunderstanding of the facts had led to the non-publication of these records.

The report was referred to the Committee of Publication, with instructions to publish also the report of the experiments of last year. The two reports are hereto appended.

On the Cause and Prevention of the Darkening of Milk-Sugar during Trituration; by Lewis Sherman, M.D., Milwaukee, Wis.

Those of the Institute who were present at the presentation of the last report of this Committee will remember that darkening of the metals under trituration was shown by the writer and claimed along with other corroborative facts as a proof of the indefinite divisibility of drugs by prolonged trituration. You will also vividly remember that that much-esteemed co-laborer, Dr. C. Wesselhoeft, presented at that time some interesting observations on the darkening of milk-sugar by prolonged trituration.

The inference was to be made that the observations on the metal had been faulty and that possibly the change of color to which I had called attention was due to a cause other than drug subdivision; although we have shown that the metals made into fine powders by chemical precipitation are also dark, some quite black, and that prolonged trituration of such substances as red coral and red iodide of mercury had not in our hands produced dark powders, but had only intensified the red, thus rebutting the argument against drug subdivision.

I have thought it desirable and even important to investigate the cause of the dark discoloration of the milk-sugar triturates presented by Dr. W.

Accordingly I have made and here present a synopsis of the following experiment:

1. A partially cleaned porcelain mortar containing several pestles was set in motion, empty. There appeared at short intervals sparks of light along the lines of contact, especially near the rim of the

mortar, and after a few revolutions a dark ring or streak on the mortar along the track of each pestle. On rubbing the finger along one of the streaks there was collected a small quantity of a fine, dark-gray powder which did not increase in quantity as the revolutions continued.

2. The mortar and pestles were then thoroughly cleaned with distilled water and alcohol, and the machinery set in motion as before. The sparks appeared even more frequently than in the previous experiment, but no dark streaks appeared, and no dark powder was found.

3. A few grains of milk-sugar were then sprinkled in the mortar in the tracks of the pestles while the revolutions continued. The sparks became less frequent, but dark streaks appeared and in a short time a grain or two of a dark powder could be scraped from the mortar and more was formed as the grinding progressed.

4. Another porcelain mortar was cleaned and there was placed therein 50 grains of milk-sugar to each of the seventeen pestles. The sugar was ground till each 100 grains had received fifty-four hours' grinding—a process which took several days. At the end of this time the milk-sugar was found to be as white as when it was placed in the mortar. No sparks were seen and no dark rings were found on the mortar. A sample of the milk-sugar thus ground is here shown; the remainder is still in the mortar and my intention is to continue the triturations for a longer period.

5. In another mortar was placed a quantity of milk-sugar like the last, and the grinding proceeded with in the same way, except that the pestles were weighted to the extent of three or four pounds. (The regular weight being about one-half of a pound). Again the sparks and the dark rings and the dark powder appeared till the milk-sugar was discolored.

6. As a companion to the 54-hour milk-sugar trituration, I prepared a batch of materials for *Cuprum metallicum* $\frac{1}{100}$, 70 grains to each pestle, and left it to grind until each 100 grains had received the equivalent of 32 hours' work. The product was a dark gray or slate-colored powder, like the triturations of copper shown in the previous reports of the Bureau of Pharmacy.

Those of you who are familiar with the principles and facts of chemistry can now guess the cause of the darkening of the milk-sugar triturations and do not need to be informed that chemical tests showed that the coloring material in discolored milk-sugar triturations is nothing more nor less than carbon produced by the partial combustion of the milk-sugar itself. This charring of the organic matter corresponds exactly to the ignition of gunpowder by the

striking of the flint-lock, and takes place only when the surfaces of the mortar and pestle are in contact. Contact of mortar and pestle are easily and effectually prevented by "feeding" the pestle with a proper quantity of the milk-sugar and keeping off undue pressure.

Detailed Supplementary Report of Provings on the subject of Pharmacy; by C. Wesselhoeft, M.D., Boston, Mass.

At the meeting of the Institute of 1885, the subject of "Potentization by Means of Trituration and Succussion" was referred to this Bureau, whose Chairman, Dr. Lewis Sherman, sent to the members of the Bureau a circular proposing to settle, as far as possible, the following questions:

1. Can the medicinal power of a *dissolved* drug be increased by succussion?

2. Can the medicinal power of a very finely divided, insoluble drug be increased by trituration?

For the purpose of making the necessary experimental tests for the solution of the above questions, Dr. Sherman distributed among the members of the Bureau a quantity of preparations of a drug for the purpose of proving the same.

At the meeting of the Institute held at Saratoga in 1886, the reports of the provers were duly made, referred and printed in the TRANSACTIONS of the Institute of that year. Among them were ten provings of the substance distributed by the Chairman, and single provings of a few other substances having no relation to the questions propounded.

The substance selected for experiment was *Mercurius solubilis H.* in the 2d, 3d and 60th cent. triturations. Some ground for a long time; some only mechanically mixed and, lastly, a number of plain sac. lact. powders. The members of the Bureau were ignorant of the substance and potencies proven till after reports were presented.

The Institute at that time ordered a continuation of the same subject, as more experiments were needed before any conclusions could be arrived at.

At the next meeting of the Institute a second set of provings were presented. The substance selected by Dr. C. W. Butler, then Chairman of the Bureau, was, as in the first instance, *Mercurius Solubilis H.* in proportion of 1 : 100 mixed; in the 1st and in the 30th centesimal triturations, and a number of plain three-grain powders of sac. lactis. As in the previous case, the provers were uninformed of the nature of the substance till after the reports were made.

As this is in a certain sense a special report, made, not by the Chairman, but by a member of the Bureau, it is but fair to state that the provings having any relation to the questions propounded, were also made under the direction of one member of the Bureau, and in every case the provers were students of the Boston University School of Medicine.

If the Chairmen of the Bureau, Drs. Sherman and Butler, were unable to get any other responses it was not their fault, and no blame attaches to them. On the other hand, it would be unfair to ignore the work of the provers who volunteered their services, and who faithfully did their work; this work was published in the TRANSACTIONS of 1886; but the report of the ten faithful provers of last year, although *properly made to the Institute*, was for some unaccountable reason omitted from the TRANSACTIONS. The report was made by Dr. J. P. Sutherland, of Boston, in behalf of the writer of this report, who was temporarily confined to his bed by illness, but who hopes that the Institute will accept at this time some conclusions drawn from the results of the provings embodied in the reports of 1886 and 1887, and that the report omitted last year will be properly printed this time.

The provings of 1887 are arranged side by side, as they were in the previous year, for easy comparison. If the reader will run his eye over the head of the first ten columns, he will observe that the reports therein contained followed the use of Saccharum lactis powders, and that on the whole they were quite as voluminous as those of the next set of provings, reported after trying the 30th cent. trituration; nor were they very different in result, so that it is difficult to say that any effect followed the 30th, which could not also be found where no medicine was taken.

We naturally should expect a more pronounced result from the lower attenuation of the 1st centesimal of Mercurius sol. H., both mixed and triturated. But, unfortunately, even here the effects are not so pronounced as to permit the positive conclusion that they were due to the medicine given, each powder containing $\frac{1}{100}$th of a grain. We find, for instance, headache, sore throat, urging to stool and diarrhœa among four provers; itching eruption in one, and dizziness, etc.

This might pass for evidence that the preponderance of diarrhœa and tenesmus, and also the sore throat and nasal catarrh, were due to the medicine taken, were it not for the counter evidence of the ten provers, who had almost the same symptoms to report after having taken only Saccharum lactis; for among these also we find four instances of diarrhœa, colic and urging, while the other symptoms

recorded do not vary materially from those in which some medicine had been taken.

While there is very little doubt that a portion of the results obtained were due to the medicine, it is impossible to say which were due to it and which were not. In some respects the proving presented in 1887 exhibited greater signs of congruity than that of 1886; yet the difference does not seem great enough to be looked upon as evidence of the kind we are in search of; that is, of a kind to solve the two questions we have for two years been engaged upon.

Your committee hopes that they will not be misunderstood in failing to accomplish their task. As has been said before, in and out of the Institute, we have again demonstrated that the proving of drugs upon the human system is a much more difficult and uncertain matter than is generally supposed. This we have learned from our attempts, and also that, in order to arrive at definite conclusions regarding our questions, another method will have to be followed which has not received sufficient attention so far, and the method will in future have to be conducted on other principles. To state it briefly, *if in future provings there exists the same incongruity after medicine had been taken, or apparent congruity of effects when no medicine had been taken, the inevitable conclusion must be that the proving was valueless. In future, if provings are to be the basis of our progress, they can and must be judged by the rule that all discordant results are to be mercilessly eliminated, and only that retained which positively agrees in all, or at least in a majority of provers.*

This has never been done in precisely this way. The consequence is that a great deal of useless and unreliable matter has been printed among much that is useful. To separate the wheat from the chaff has always been loudly demanded, but no one has ever pointed out a way to do it. It is perfectly simple if the rule above suggested is followed out fearlessly, that is, with due regard to the law of evidence.

If this rule is properly adhered to another method of making the results of proving more congruous and pronounced will soon appear; in order to obtain such congruous results more medicine should be given. From refined and attenuated drugs the average healthy prover experiences no change of feeling, as is very easily demonstrated by the heretical Saccharum lactis counter-test. At the same time we cannot, and dare not, give drug preparations to willing provers when we are ignorant of what we are giving; we cannot endanger the health of individuals for the sake of pronounced effects, and, on the other hand, we obtain unreliable results from highly

attenuated doses, especially if the prover is ignorant of what he is taking, and while his expectation and imagination are too active.

In order to avoid these errors *we shall have to fall back upon tests upon animals—before or after the test upon the human subject.*

Do not believe that we mean the clumsy experiments usually recorded in physiological laboratories, nor that we mean the clumsy mechanical interpretation of such tests usually signifying increased or diminished blood-pressure.

We have in mind a much finer set of tests, which we hope will in future be inaugurated. Allow me to embody the idea in a few words: Let us learn to observe healthy individuals; then let us learn how to produce in them various forms of disease; none will doubt that this has been and can be done. *Then let us devise tests by which the artificially diseased animal can be restored to health;* with such a test an enormous gain will have been made. To illustrate: Supposing a certain set of individuals had been rendered sick by subjecting them to certain morbific agents; and one-half of the number were allowed to recover of its own accord, while the other half were treated upon homœopathic principles; and supposing, furthermore, that the individuals so treated recovered in much less time than those left to themselves, would not this prove much more than the uncertain clinical test upon sick human beings? It certainly would be much more advantageous to make use of the direct inductive experiment with animals whom we can absolutely control, and sacrifice, if need be, in a great cause, than the cautious, uncertain, groping tests upon suffering human beings entrusted to our care.

Let us not be misunderstood as slighting the fundamental principles of homœopathy. Any one of you who thinks that investigation is slighting principles is altogether in the wrong. *What we have desired to do for years is to uphold those principles by improving the methods of their application.* And it is our earnest hope that those who follow us in this work will hold tenaciously to this idea; that investigation and improvement of methods is not a war upon principles. To mistake the investigation and improvement of pharmaceutical methods, and the correction of hopelessly delusive habits of proving, for a war on the principles of homœopathy is certainly to allow their zealotism to lead them astray.

Hereto is appended the detailed records of provers which was omitted last year:

TABLE ILLUSTRATING THE COMPARATIVE VALUE OF

BY STUDENTS OF THE BOSTON UNIVERSITY SCHOOL OF MEDICINE.

1	2	3	4	5	6
Mr. E. E. HALE. Student B. U. S. M. Age 26. General health good.	Mr. M. W. TURNER Student B. U. S. M. Age 30. General health good.	Miss JESSIE SHEPHARD. Student B. U. S. M. Age 26. General health good.	Mr. A. M. HUBBELL. Student B. U. S. M. Age 24. General health good, but suffers from chronic catarrh of the nose.	Mr. S. R. F. LANTZIUS-BENINGA. Student B. U. S. M. Age 28. General health good.	Miss EMMA R. BUTTERFIELD. Student B. U. S. M. Age 27. General health good.
Box 1. *Sacch. lactis.*	Box 1. *Sacch. lactis.*	Box 1. *Sacch. lactis.*	Box 1. *Sacch. lactis.*	Box 1. *Sacch. lactis.*	Box 1. *Sacch. lactis.*
3 powders a day from April 16 to April 22. April 16, slight headache in afternoon. April 19, frontal headache during forenoon. April 22. headache in afternoon.	3 powders a day from April 15 9 p.m., to April 22, 6.30 a.m. April 18, colic pains at night. April 19, slight diarrhœa early in morning (having wet feet in a storm the night before); later, inclination to stool, but no passage. April 20, slight pyrosis in morning; pyrosis very sour in afternoon. April 21, catarrhal sore throat.	2 or 3 powders a day from April 16 to April 23. No symptoms.	3 powders a day from April 18, 2 p.m., to April 25, 6.30 p.m. April 21, slight headache in afternoon, pain elevated in frontal region. April 22, headache.	3 powders a day from April 15, 10.30 p.m., to April 22, 7 a.m. April 15, sore throat and nasal catarrh. April 16, throat and nose unchanged, slight cough during afternoon. April 18, throat and nose unchanged, slight cough. April 19, nose better, throat and cough unchanged. At 5 p.m. pain in bowels, 3 stools. April 20, nose and cough better, throat a little better. April 21, early slight headache, nasal catarrh and cough disappeared, throat still somewhat dry. April 22, throat all right. April 23, (rheumatic) pain in left knee and leg in morning.	3 powders a day from April 18, 7 a.m., to April 24, 9 a.m. No symptoms.

PROVINGS (OF TRITURATIONS) OF MERCURIUS SOL. H.

UNDER THE DIRECTION OF DR. C. WESSELHOEFT, 1887.

7	8	9	10
Miss LOUISE A. GRIFFIN. Student B. U. S. M. Age 30. General health good.	Mr. HENRY H. BRALEY. Student B. U. S. M. Age 35. General health good.	Miss CLARA BARNES. Student B. U. S. M. Age 22. General health good.	Miss EMMA KALBFLEISCH, M.D. Student B. U. S. M. Age —. General health good.
Box 1. *Sacch. lactis.*	Box 1. *Sacch. lactis.*	Box 1. *Sacch. lactis.*	Prover has taken the powders at the same time with the other provers and all 4 boxes.
1 to 3 powders a day from April 17, 7.45 a.m., to April 26, 6 p.m. April 19, cough; pulse 76 at 1.30 p.m. April 20, cough; pulse 90 at 7 a.m.: headache especially in eyes, the eyelids felt as tho' burnt spots were on them; "cheek-bones" ache: limbs weary. April 21, heat in left side of head; left ear aches somewhat: pulse 108. April 22, pulse 78. April 23, pulse 78.	2 to 3 powders a day from April 15, 10.30 p.m., to April 23, 2 p.m. April 19, slight diarrhœa with heaviness in top of head. April 20, diarrhœa continued. no irregularity or increase of occurrence of evacuations, simply liquid nature of discharge. April 21, stool normal.	2 or 3 powders a day from April 16, 9 p.m., to April 23, 1 p.m. April 17, frequent urination; had regurgitation of coffee through the nose. April 18, hiccough after taking powders. April 19, 2 p.m., headache, 6 p.m., left ear red and hot and right ear pale and cold, also slight corresponding condition of the cheeks; 7 p.m., very flushed face, left cheek slightly hotter than right; slight diarrhœa; some sneezing in evening. April 20, early in morning bad taste in mouth, tongue thickly coated dirty yellow. April 21, diarrhœa in evening. April 22, dry hacking cough. April 23, short dry spasmodic cough; diarrhœa. April 24, cough less frequent. April 25, frequent cough.	"The only symptom was a small boil on chin that went away as soon as I stopped taking the medicine. Other than that I have been entirely well."

1	2	3	4	5	6
Box 2. *Merc. Sol. H.* 30c. 3 powders a day from April 27, 10 p.m., to May 4, 8 a.m. April 28, head feels slightly heavy; at 10 p.m. frontal headache. April 29, severe headache and coated tongue in the morning May 2, headache at night. May 3, headache in morning. May 4, headache in afternoon.	Box 2. *Merc. Sol. H.* 30c. 2 or 3 powders a day from April 25, 7.15 a.m., to May 2, 12 m. April 25, painless diarrhœa at noon. May 1, diarrhœa in the morning (2 stools).	Box 2. *Merc. Sol. H.* 30c. 2 powders a day from April 26 to May 5. No symptoms.	Box 2. *Merc. Sol. H.* 30c. 2 or 3 powders a day from April 28, 6.45 a.m., to May 5, 12.15 p.m. April 28, frequent urgings to stool. May 3, headache in afternoon. May 4, headache in morning.	Box 2. *Merc. Sol. H.* 30c. 3 powders a day from April 24, 1.15 p.m., to April 30, 1.15 p.m. No symptoms while taking the powders. May 1, pain in abdomen after dinner. May 2, very tired all day, pains in various parts of body, especially in right side of head and left side of chest; after dinner pain in abdomen, throat very dry.	Box 2. *Merc. Sol. H.* 30c 2 or 3 powders a day from Apri 27, 9 p.m.. t May 4, 9 a.m. No symptoms.
Box 3. *Merc. Sol. H.* 1c. 3 powders a day from May 8, 9 p.m., to May 15, 3 p.m. May 8, headache in morning. May 11, slight headache in morning. May 12, frequent urgings to stool in afternoon and night. May 14, increased amount of urine.	Box 3. *Merc. Sol. H.* 1c. 3 powders a day from May 5, 7.30 a.m., to May 11, 8.30 p.m. May 6, catarrhal sore throat all night. Pulse 90. May 7, sore throat and cold in head, with cough and raising of thick transparent mucus. Pulse 84. May 8, cold somewhat better; sore throat gone; some cough. Pulse 80. May 9, cold better in head, headache, pulse 80. Seems to be canker on soft palate, right side. Slight diarrhœa. May 10, cold better.	Box 3. *Merc. Sol. H.* 1c. 2 powders a day from May 9 to May 18. No symptoms.	Box 3. *Merc. Sol. H.* 1c. 2 or 3 powders a day from May 10, 6 a.m., to May 17, 12.30 p.m. May 10, frequent urgings to stool. May 13, dull headache some of the time. "Cold in head," quite a profuse discharge from the nose. The drug leaves an unpleasant taste in the mouth after taking. Slight cough at times.	Box 3. *Merc. Sol. H.* 1c. 3 powders a day from May 2, 9.30 p.m., to May 9, 7 a.m. May 4, two small red, itching pimples appear on inner side of right forearm. May 5, the pimples have white points. May 6, slight headache in frontal region in forenoon.	Box 3. *Merc. Sol. H.* 1c. 2 or 3 powders a day from May 6 9 p.m., to May 15, 9 a.m. May 7, fine red eruption on chest and under arms. This was first noticed at night, and continued to May 12, when it began to disappear. The eruption was very fine and gave the skin a rough feeling. It did not itch unless irritated by clothing or from exercise. Worse in daytime, almost disappearing during night. Not vesicular, simply little pin-point elevations.

7	8	9	10
Box 2. *Merc. Sol. H.* 30c. 3 powders April 29, 3 powders a day May 7 and 8, and from June 1, 7.30 a.m. to June 4, 7 p.m. April 29, severe headache, lasted over a week: severe cold; left off powders. May 8, face swelled, seemed to be ulcerated tooth, grew worse, an abscess formed on lower jaw; face much swelled, abscess lasted a week, very painful, after it was lanced got better. June 2, very dizzy in the morning while walking; eyes dazed. June 3, some dizziness with dull headache. June 4, dull headache, some dizziness but not as much as day before.	Box 2. *Merc. Sol. H.* 30c. 3 powders a day from April 26, 4 p.m., to May 2, 8.30 p.m. April 30, slight diarrhœa. May 3, severe cold, sore throat, some fever; took belladonna 3d four times a day, 8 doses. Throat better, but cold assumed nasal form; took arsenicum 3d, this was followed immediately by diarrhœa. After this took nothing and improved gradually until May 10.	Box 2. *Merc. Sol. H.* 30c. 3 powders a day from April 26, 9 a.m., to May 5, 9 a.m. April 26, 6 p.m., left ear red and hot, right one pale and cold: cough; diarrhœa. April 27, cough less frequent.	
Box 3. *Merc. Sol. H.* 1c. 3 powders a day from June 5, 8.30 a.m., to June 10, 7 p.m. June 5, at evening, sharp pain thro' heart lasted five minutes; a little nauseated. June 6, heavy head, dizzy, unsteady walking. June 7, dizzy just after taking powders; eyes feel dazed. June 8, dizzy going up stairs and walking out of doors. Face beginning to swell with another abscess on lower jaw; limbs weak. June 11, no dizziness, head clear.	Box 3. *Merc. Sol. H.* 1c. 3 powders a day from May 10, 4.15 pm, to May 17, 10 a.m. May 14, slight diarrhœa and dizzy feeling, especially on rising suddenly from the chair.	Box 3. *Merc. Sol. H.* 1c. 2 or 3 powders a day from May 4, 9 a.m., to May 11, 7 a.m. May 4, sneezed several times after taking the first powder; diarrhœa later in the forenoon. May 5, could not sleep till long after midnight, tossed a great deal. Skin of face itched considerably. May 6, some itching of face, relieved by rubbing the hand over it. In afternoon the same dry, short cough as when taking box 2. May 7, severe frontal headache all the afternoon (probably the result of an examination in the forenoon). May 8, hiccough after first powder; walked in sleep in the night, never did it before, but think it was due to great excitement the day previous. May 9, 8 a.m., sharp piercing pain around the heart. Headache all the afternoon, better on walking in the open air. May 10, have felt weak and miserable all day, severe headache from about 3 to 7 p.m., short spasmodic cough—worse after each meal. May 11, boil on chin, other slight eruptions on the face.	

1	2	3	4	5	6
Box 4.*	Box 4.	Box 4.	Box 4.	Box 4.	Box 4.
3 powders a day from May 20, 10 p.m., to May 26, 8 a.m. May 23, slight headache in afternoon and night. May 24, slight pain in left side in the morning. diarrhœa. May 25, slight diarrhœa in the morning. *Merc. Sol. H. finely precipitated, and mixed with 99 parts of sacch. lactis.	3 powders a day from May 15, 7.30 a.m. to May 21, 9 p.m. May 17, diarrhœa in the morning, catarrhal sore throat. May 18, diarrhœa in afternoon. May 19, diarrhœa (2 stools). May 20, diarrhœa, 4 stools, all watery and painless; feels very weak. May 21, diarrhœa, 5 stools, all watery and painless; great weakness.	2 powders a day from May 20 to May 30. No symptoms.	2 or 3 powders a day from May 21, 7 a.m., to May 27, 12.30 p.m. May 23, dull headache in morning. May 26, frequent urgings to stool. May 27, frequent urgings to stool.	3 powders a day from May 11, 1.15 p.m., to May 17, 10.15 p.m. May 11, slight nasal catarrh, light (rheumatic) pains in left leg and ankle. joint, small itching pimple on left hand. May 12, the pimple disappears. May 13, pain in neck descending into upper part of chest; after breakfast, dinner and whole afternoon and evening, periodical heavy pains in abdomen; diarrhœa (5 stools); eructations with pain, especially in lower part of chest; swallowing painful. May 14, slight pain in swallowing; periodical slight pains in abdomen; no stool. May 15, in morning periodical slight pain in abdomen, slight pain in swallowing, pain in left frontal region, sneezing several times and discharge from nose. About noon all symptoms disappear.	3 powders a day from May 15, 1 p.m., to May 20, 9 p.m. May 17, very bad taste in mouth; slight vertex headache came on at noon, dizziness upon rising from chair, everything black before the eyes for a second after rising quickly from a sitting position. May 18, 6 a.m., a diarrhœa-like discharge, preceded by rumbling of the bowels, a faint weak sick feeling; 3 more discharges before 9 a.m. May 19, in the morning 3 thin discharges, tenesmus after stool, bad taste in mouth, weak feeling; no diarrhœa the rest of the day. May 20, diarrhœa in morning (3 stools), between 9 and 10 p.m. 2 more stools. May 21, early 2 stools, very bad taste in mouth, breath offensive, no appetite, general weak feeling. May 22, no diarrhœa, otherwise the same as May 21. No further symptoms except general tired, weak feeling with very bad taste in mouth and loss of appetite. Tongue has not been much coated at any time, had a slight yellow coating at base.
		May 16, occasionally slight pain in abdomen, eructations, sneezing. Early in morning one stool, fluid; in afternoon and night pain in upper and outer border of left orbit. May 17, early slight pain in abdomen, eructations much less than the day before. May 18, early slight pain in abdomen, morning, pain in right frontal region, sneezing, very tired and sleepy all day. May 19, afternoon, slight headache in frontal region, sneezing, slight pain in abdomen after rising in the morning and after meals. May 20, sneezing 8 p.m., vertigo (a very hot day).			

7	8	9	10
Box 4.	Box 4.	Box 4.	
3 powders a day June 13 and 14. June 13, dizziness	3 powders a day from May 20, 6 a.m., to May 21, 6 a.m. (in Boston), and from June 5, 8 a.m., to June 7, 8 p.m. (in New Bedford). June 5, diarrhœa. June 6, diarrhœa. June 7, diarrhœa. June 8, stopped taking the powders and diarrhœa ceased.	3 powders a day from May 16, 8 a.m., to May 20, 7 a.m. May 17, frontal and vertex headache, dull feeling over eyes, flushed face; some cough, worse after eating. May 18, headache all day. May 19, diarrhœa. The boil which started while taking box 3 seemed to have retrograded during the five days when I was taking no medicine, but on taking box 4, it seems to have restarted, and is now very hard, red, sore and swollen, altho' it does not yet suppurate. Considerable headache, a dull headache, worse from studying, and I find it very hard to fix my mind on the studies. Feel very weak and miserable, just as before stopping box 3. Appetite has not been good for several days. Feel very sleepy especially in the afternoon, but cannot sleep;	

tongue coated yellowish-white, on the back part mostly. My face flushes up every afternoon about 6 p.m., the left ear is always redder than the right. The boil is on the left side of the face near the chin: diarrhœa in the evening.

May 20. was ill nearly all night, could not sleep till after one o'clock, and when I did sleep, seemed to dream all the time. Awoke very early this morning. Last night was very restless and had to turn over almost constantly—burning in soles of feet (walked a great deal in afternoon and evening), and the whole body felt hot inside, altho' the skin was not especially hot to the touch. Perspired a good deal. The boil (?) pained me considerably and could almost feel it swell. Whole left side of face is sore and swollen. Thought I detected fluctuation in the night, but cannot this morning. This morning had a very bad mouth and tongue, and feel very weak and nervous. Could eat no breakfast. Have had 4 diarrhœic discharges since getting up (8.30 a.m.); there is smarting and burning at time of stool and a slight chilly feeling afterwards. After writing the above the diarrhœa and urging were almost constant, each time was followed by great pain in rectum and prostration. Rode over to the college about 10 a.m and took examination, felt very weak, nervous and trembling, constant urging for stool, and had many faint turns. After examination had a very painful profuse stool and severe pain and prostration afterwards. Profuse perspiration. Rode home, but had to walk a few steps and staggered and almost fell, but did not feel at all dizzy. After a while took some toast and tea and felt much better. Head aches quite badly and eyes feel very heavy. Hands tremble all the time. Cannot talk straight. The abscess on the face is very painful, and a minute vesicle has appeared on the top of it since morning. Feel sleepy but cannot sleep. Took a powder of nux vomica 3d just before going to the college, by advice of one of the students. 4 p.m. walked to Dr. Wesselhoeft's office and back, felt pretty weak on my return. Took the medicine he prescribed. No discharge from the bowels since 3 p.m. (at 6 p.m.) and not so much urging—previous to that almost constant urging. Head aches, pains come and go, ankles and knees ache, back aches in sacral region. Headache most frontal. 10 p.m., in bed since writing the above. Backache not so bad, no movement of bowels, ate a bowl of porridge for supper with great relish. Shooting pains in head during evening, very restless and thirsty, but on the whole much better. Have taken the prescribed remedy every two hours. Have perspired a great deal, but the afternoon and evening have been very warm. Opened the boil to-night and quite a quantity of pus was discharged—followed by severe shooting pains all over the side of face. 10.30 p.m. tenesmus.

May 21. had a very good night's rest and feel much better this morning, but am keeping real quiet. Ate some porridge. Tongue thickly coated and tremulous. Frequent tenesmus with only flatus. About 9 a.m. stool, light yellow, mushy; sick feeling during the stool, but not so great prostration afterwards as I felt yesterday. 11 a.m. took a little more porridge and soon had a small very painful stool, much burning and excoriating. About 2 p.m. felt so faint and hungry took some gruel, and soon had another small stool, not quite so painful. Headache all the afternoon, at 6 p.m. quite severe. At 5 p.m. great urging with only a slight stool. 11.30 p.m. one movement since 6 p.m., ate two slices of toast, took a sponge bath; head keeps up an almost constant ache in spite of hot and cold applications. The hot ones seemed to relieve just while being applied, but headache returns as soon as they are discontinued. Trying to think or study makes headache worse. Have had some gurgling in the bowels this evening and some backache in the sacral region. Tongue coated yellow and tremulous.

May 22, 6 p.m., slept well last night and felt much better early this morning, ate toast and drank tea. About 9 a.m. began to feel pretty weak. About 11 a.m. painless stool—black lumps. At noon ate toast and drank tea, and have felt real bright all the afternoon. Have sat up and studied—no headache to speak of. Two painless stools since noon—tenesmus with flatus several times between. Feel weaker now. Ate porridge about 6 p.m.

May 23, could not sleep last night till after midnight except one slight doze, in which I jumped after falling asleep and awoke. Tossed a good deal till after midnight (a very warm night). This morning felt well except for a tired and weak feeling. Ate some gruel and drank some tea. Went over to college to examination and felt pretty well, only weak, cannot stand long at a time. This afternoon was tired and sleepy, but could not sleep. Studied some and ate toast and tea for supper and drank milk. Have not taken the medicine so frequently to-day. Bowels have not moved to-day. Am very thirsty.

June 1, each succeeding day after writing the above kept growing better. Am now well.

The President appointed as the Committee on Pharmacy for next year, C. L. Cleveland, M.D., of Cleveland, O., Chairman; T. F. Allen, M.D., of New York, N. Y.; W. Y. Cowl, M.D., of New York, N. Y.; E. M. Howard, M.D., of Camden, N. J., and A. R. Wright, M.D., of Buffalo, N. Y.

Dr. T. Y. Kinne, of Paterson, N. J., offered a resolution that, "Hereafter no report or paper shall be rejected by the Committee of Publication except with the concurrence of a majority of said committee." Adopted.

The President read a letter from Dr. Lilienthal, expressing his regret at his inability to be present, and tendering his assistance in the work of certain bureaus for the ensuing year.

On motion, the General Secretary was instructed to forward a congratulatory telegram to Dr. Lilienthal. The following, as prepared by the Secretary, was subsequently read by the President and approved by the Institute.

NIAGARA FALLS, N. Y., June 26th, 1888.

PROFESSOR SAMUEL LILIENTHAL, M.D., 1316 Van Ness Avenue, San Francisco, Cal.:

The American Institute of Homœopathy, in session at Niagara Falls, N. Y., congratulates you upon your recently completed half-century of eminent professional usefulness and honor, and expresses the hope for its long and uninterrupted continuance.

PEMBERTON DUDLEY, M.D.,
General Secretary.

The following telegram was subsequently received in reply:

SAN FRANCISCO, Cal., June 28th, 1888.

PEMBERTON DUDLEY, M.D., General Secretary, etc.:

Your telegram the best rejuvenator. May the American Institute prosper forever.

SAMUEL LILIENTHAL.

THE ADDRESS IN PÆDOLOGY

Was delivered by B. F. Dake, M.D., Chairman of the Bureau. Following is the text of the address:

Mr. President and Members of the American Institute of Homœopathy:

The Bureau of Pædology brings again its annual budget of interesting papers.

It has nothing to report in the way of new books or discoveries, but is pleased to note the continued and increasing interest upon many subjects related to the cause.

There is scarcely a medical journal that is not devoting special space to pædology. Many are extending it, and journals devoted exclusively to pædology are coming before the profession.

And yet, when we consider that it is in this particular field that homœopathy won its highest laurels and has its largest patronage, it is a matter of surprise that it has not a single journal devoted especially to the work.

The subject before the Bureau this year is the nervous diseases peculiar to infancy and early life. In selecting this subject, the Chairman fully appreciates the difficulties, surrounded as it is by so much doubt and uncertainty. He did not expect to remove the doubt, or clear up disputed points; he only expected to view the field from our own standpoint, and determine, if possible, the advanced ground we occupy. How well we have succeeded, our papers must determine.

The programme in your hands indicates the direction of our labors.

In reviewing the papers of the Bureau, the Chairman notes the doubts expressed by each regarding the etiology of respective conditions under consideration.

Dr. Crank, in his able article, after reviewing the several etiological factors in infantile spinal paralysis, adds,—"Whatever view we may take in the matter, it is evident that we are not in possession of a general sufficient cause: much remains to be determined."

Dr. Owens, in his excellent paper concerning "Post-Diphtheritic Paralysis and its Etiology," refers it to a diathesis, or constitutional predisposition.

Dr. Tooker, in his very practical article on the treatment of the same, in referring to the causes, says,—"We do not know its nature or origin."

And Dr. Lilienthal, in his contribution on the treatment of infantile spinal paralysis, in his unreconciled way, remarks,—"We meet with an unknown something, which too often baffles the skill of the best treatment."

"The old school," he adds, "are hard at work to detect the etiology of germs. Virchow's cellular theory, discarded once, is brought forward again, but it does not go to the bottom; there is something

behind it which the workers in the bacteric laboratory will never find out."

It is evident to the most casual observer that these writers but express the feelings experienced by every physician.

What is this unknown something that eludes the grasp of the most careful observer, and that thwarts the efforts of the most skilful physician?

In considering diseases peculiar to infancy and childhood, we meet in a general way about the same class that we do in adult life, only modified by the circumstances of age. Thus what is a convulsion in a child, may have for its correspondence in the adult, a simple rigor or chill, while the wild delirium has the correlative headache only.

Though subject to similar conditions in adults, yet disease as met with in infancy and childhood requires special study and consideration. Not a few are the outgrowth of a rapidly developing organism and increased functional activity, which attains its maximum during the first year, and is followed or accompanied by the heaviest mortality. Nearly one-third of the race perish during this period, and with all our boasted skill and intelligence, we yet stand, as it were, on the shore gazing helplessly though wistfully, towards the wrecks that are constantly going down all about us, on the tempest-tossed ocean of infantile life.

As we pass from infancy into childhood, we meet with another class of diseases that we do not so commonly meet with in earlier life; diphtheria, with its sequelæ, and the long list of eruptive and kindred fevers, together with many forms of nervous derangements, such as chorea, epilepsy, etc. It is in the consideration of this class of affections,—the various courses they may pursue and forms assume, with their sequelæ,—that so often puzzles and perplexes the physician.

We account for the heavy mortality during infancy on natural causes,—conditions peculiar to its tender age,—but when we come to consider the etiology of many conditions peculiar to childhood, we are lost in our search for a general sufficient cause.

And yet while bemoaning the great dearth in the field of nervous diseases, there is still much to encourage us; for when we consider that it is but a few generations ago since the unfortunate epileptic was considered in league with the devil, and the dethroned in mind was judged worthy of the dungeon or death as the fittest treatment; where once stood blocks reeking with innocent blood, now rise hospitals and asylums to afford comforts and opportunities for cure, while general practitioners and specialists patiently ply their skill for restoration and prolongation of life.

There is now scarcely a large city that does not afford its public or private home or retreat for the treatment and cure of nervous dis-

eases, many being exclusively for children. And the skill and ingenuity of the profession has been largely successful in devising means, apparatus and remedies for the unfortunate among this class.

Every year pathologists are determining new facts and making more certain the true conditions, while busy practitioners are narrowing the field from clinical experience, and rendering more certain the therapeutics from the proven success of *similia*, aided or not by a profusion of mechanical agencies, *secundum scientiæ, secundum artium.*

To particularize in this direction would require a volume; and in the short limits of such a paper we can only refer to the subject in a general way, leaving to each individual member of the Bureau to present his subject according to his own judgment and experience.

It is here, in the handling of many forms of nervous diseases particularly, and their outcome, that no school of medicine can arrogate to itself exclusiveness of agencies and methods; and the true conservator of human life and limb will not be unmindful that art and nature abound in methods of aid and matters of cure, that air and water and cleanliness and exercise, and proper nutrition are nature's offering, while science and art as handmaidens stand ever ready to administer by manipulation, apparatus and device and pharmaceutical means; and the true homœopathist, with his armamentarium of *similia*, with a range of keen perception and prescient vision, will consider and compare the systemic and constitutional indications; and imbued with the philosophy of the psoric theory, will not overlook the conditions that lie back in the *primæ viæ*, and so meet the invader before he has fairly passed the threshold.

Hahnemann's teaching was not the induction of an idle dream—no chimeric vaporing of an eccentric crank. It was a rational deduction from an experience and observation and wisdom, rarely vouchsafed to man.

His synthetic reasonings saw in the aggregated race the repetition of the individual man.

And it is the result of my own experience and observation, that a large proportion of not only the nervous diseases we meet with to-day, but of all others, are the legitimate results of the sins of our progenitors.

It will not satisfy the suspicious judgment of the enlightened public of to-day to call a thorn a rose, even though it be to shield a king. "The way of the transgressor is hard."

It is a saddening, sorrowful picture; but few of the race have always led regular healthful lives, while a large proportion are absolutely dissolute and immoral; and what the world is to-day, is but a repetition of the past and what Hahnemann saw in his day. A few

generations of such experience and it needs no philosopher or mathematician to calculate results.

The footsteps of the followers of the harlot and the frequenters of the harem take hold on hell!

The liaisons of the lascivious and lecherous debauchee, reeking with the rotten, rickety lesions begotten of the brothel, blast and blight all the progeny he begets with the corroding curse of venery!

The bestial behavior of the besotted and bloated bacchanalian degenerates his descendants in physical and mental stamina.

And the gluttonous, ever-eating epicure overtaxes and oppresses his organs of digestion, and overloads his vascular system with vile stuff that vitiates the vitality of his offspring.

While, on the other hand, the underfed for the want of food and nutritious nourishment, are undermined in blood and beget a feeble brood.

But to drop the alliteration; if the human family took half the care to better the human stock that they do to better their flocks and herds and crops, a far more healthy, hardier and more intelligent and longer-lived race would be the legitimate result. But how few considerations of fitness are ever entertained.

The sexes accidentally or incidentally meet, fancy or "fall in love" with each other, attachments spring up, they marry without ever having had a serious thought of antecedents or results,—perhaps entirely unsuited in health, temperament, or otherwise, and a faulty issue is the inevitable consequence.

This laxity continuing, generation after generation, and we have an enervated and degenerate race.

No wonder that epilepsy, paralysis, hysteria, dementia and a horde of neurotic diseases abound, while such as escape so grave a possibility, the sweeping hurry of the business habits of the day make nervous and dyspeptic, and preternaturally old; and with all the miseries of insomnia and neurasthenia, go down to early decay.

And, man of letters, tell us what kind of constitutions the offspring of such as these can inherit!

Thus, in considering and treating not only the nervous diseases of infancy and childhood, but all important lesions, we must have a wise reference to the ante-natal history and conditions, if possible, and be able, if possible, to comprehend what must have been the nature of the seed and soil to produce the kind of crop of morbid phenomena that we behold.

But it may be queried, how are we to be able to grasp and compass this entire matter, when we are unable to see or know but little if any of the antecedent history. Clearly, there is a broad field in this direction for the earnest student of etiology and history of mor-

bid forces; and the scientific prescribing of the future will be based on a pathology, acquired mainly through a better understood symptomatology and inferential diagnosis.

Symptoms, objective and subjective, are the labels on the bottles that tell us what is within—are the letters in the alphabet of hidden forces that spell out for us the name—are the cipher that, rightly interpreted, will aid us beyond a peradventure in selecting the proper *similimum* pathologically as well as symptomalogically.

Take the science of comparative anatomy; so uniform and mathematically correct are the relations of a part to the whole, that given a single part the whole may be inferred and reproduced with all its completeness.

A similar exactness obtains in botanical science, so that from either *fauna* or *flora*, a single specimen being produced, the naturalist will reproduce the entire whole in its original conformity, clothe it with its proper vestments and forms, tell us of its history, habits, haunts and modes of life, when and where it flourished,—even though it had perished from the earth before the advent of man.

Indeed, so intelligent has the sensitive and subtle art become, and the science of intricate forms and forces, that possibilities are well-nigh illimitable.

The rain drop that fell upon the shores of primordial antiquity has left its fossil imprint there so plain that the scholar of to-day will tell us from what direction came the accompanying wind that deposited the tiny drop so long ago, simply by the kind of impression it left to harden in the sand.

If such things can be so, can we not expect yet to be able to read out the cause and the nature even before the stage of irruption, from a proper inspection and comprehension of the minutest symptoms that any morbid case may afford?

"Coming events cast their shadows before." Thus armed and equipped, I believe it will yet be possible to enter the holy of the holies—the arcana of the temple of life, and spy out all its hidden mysteries, and with the *similimum* of our therapeutics, to give the "elixir of life" that shall bring perpetual bloom.

Most morbid cases present phenomena in advance of the palpable irruption, but which are so slight as to often escape casual observation, yet sufficiently discernible to a proper scrutiny to indicate the nature of the coming lesion.

In adult cases, the expressed sensations and objective indications render the conclusion comparatively an easy matter; but with infants and very young children we are left to observation and inferential acumen alone.

And there are so many diseases that appear in the initial stage so

nearly alike that it often requires the nicest discrimination to name the lesion.

I have seen an old and experienced physician commit a serious blunder in so familiar a disease as rubeola—pronouncing it variola, and supposing he had succeeded in aborting the disease, because the papules did not go on to maturity.

Many diseases are ushered in suddenly, perhaps without any other warning than a chill or a spasm—while others have prolonged prodroma—perhaps days, or even weeks—and so slightly and little disturbing as to escape the notice of the casual observer.

Yet even here we believe the field of diagnostics to be so wide that the possibilities are present, and the indications sufficiently palpable to make certain the coming lesion, and the time will yet come when a marked and practical advance in this direction will be made along the whole line of morbid forces.

We have already learned at the bedside of the ailing infant the significance of a corrugated brow, the partly closed eyelids, the squinting pupils, the piercing cry, the sighing respiration, the tossing and boring head, the jactitating limbs, the clenched thumbs, etc., and by a little stretch of scrutiny back along in this line, we might be able to anticipate the lesion by less palpable indications, yet discernible ones to a practiced eye schooled in the vocabulary of minute symptoms, and thus be able to thwart the lesion ere it shall be shaded in significance, and thus forewarned be forearmed, and gain a victory before the battle has fairly begun.

Thus closer observation and clearer understanding of the nervous elements in disease, either as an accompaniment or sequence, will enable us to anticipate the loss of motion or of feeling, and the electrical current be found even of more value; as prevention is better than cure.

The Address in Obstetrics

was next presented by Geo. B. Peck, M.D., of Providence, R. I., Chairman of the Bureau. The following is the address, as delivered:

In accordance with the rules of this society and a decree of its presiding officer, at the last session, a commonplace man (only a general practitioner) will address you a few commonplace remarks upon a commonplace subject, Obstetrics. But because it is so very commonplace is it of most importance. Theoretically the art is well-nigh perfect, improvement to be sought chiefly in the sharper delineation of the indications for remedies adapted to the various minor complications so frequently encountered in its practice and to a lesser degree in those operative procedures necessitated by graver

complications that properly pertain to surgery. Practically its conduct is rude and barbarous, utterly discreditable to the ministering spirits of a Christian civilization. This charge can best be elucidated by sketches from life which shall be at once illustrations and demonstrations of the proposition.

At a certain session of this Institute I observed a group of members discussing the use of the forceps. Drawing near, in the hope of learning some valuable lesson, I found myself destined to hear a physician loudly and boastfully remark that "Such things are useless lumber. I have pursued an extended practice in this department for ten years and never have found occasion to use a pair." He was asked, "What do you do in long, difficult cases?" "Let 'em grunt it out!" Innocently I inquired, "Doctor, are you a married man?" "Yes, I have a wife and seven children." "I cannot understand how you can speak so," was my meek rejoinder. I am wiser now, though still a bachelor.

There chanced a night when a wealthy allopathic physician, whose experience covered well-nigh a score of years, was summoned to an accouchement that did not materially increase the splendor of his reputation. The woman's pains were regular and vigorous and powerful (for she was in perfect health), but not a particle of progress was made. As hour after hour rolled away, more and more pointed hints were dropped by the bystanders as to the immediate employment of forceps, but all were in vain. The patient's struggles became absolutely terrific, so that at length an intelligent observer exclaimed, "Doctor, are you going to let that woman lie there and die for want of a pair of forceps?" He concluded then to send, *not home, but* to a brother practitioner to come and bring *his* instruments. He came, quickly applied the blades, and in a few moments safely relieved the sufferer. The attending physician then confessed that he had never possessed a pair of long forceps! Of how many hundreds of hours of needless, and worse than useless suffering, in a class peculiarly entitled to our sympathy and our assistance, that man has been the inexcusable occasion, can better be imagined than computed.

One day I asked a brother practitioner if he had ever treated any patients after a well-known "regular." He asked me why. I detailed a case then under observation that had come to me from his hands. He continued, "I have followed him in many cases, and I have yet to find a woman that he has confined whose perinæum is not badly torn." It may be added that the doctor is equally energetic in all his actions. The rapidity with which he uses up his buggies and the amount of repairs required meanwhile, excite the amused wonderment of all who learn the facts.

Dame Rumor has not infrequently borne me tales of a distinguished surgeon which would, if widely spread, ensure him so great a notoriety as a "baby-puller" as utterly to eclipse his fairer fame as a "brilliant cutter." His alleged manner of *snaking* children into the world causes ordinary accoucheurs to hold their breath with doubt, perplexity and horror.

Such doctors are types of work altogether too frequently performed by those whose education and position augur better things. Brutal indifference, lazy negligence and rapacious recklessness, each springing from supreme selfishness, eminently characterize the practice of the obstetric art in this land upon this day. Your presence here is presumptive proof, alas! not absolute, as we have already seen, that you are not obnoxious to any implied charge, but forget not that you have students and imitators, whose life-work may be shaped entirely by your hands, and therefore that it is not less your duty to humanity and to God than to your profession and to your school to inculcate at every opportune moment, both by precept and by example, that it is the physician's first business to consult for and provide for, according to his best ability, the highest welfare of every patient without reference to his own pleasure, convenience, or comfort. Furthermore, it is a question not lightly to be considered whether we have any moral right to accept, as a pupil, any one whom we believe likely, from constitution, habit, or training, to place self before the patient, though his talents be unsurpassed and his acquirements incomparable. Above all, friends, being mortal and prone to err, as our locks become silvered or thinned, as increased years and responsibilities become burdensome and the resilient energy of youth rapidly and more rapidly disappears, let us *sedulously* watch our every act lest we, whose entire life represents unflinching devotion to principle, may in an unguarded moment listen to the promptings of inclination rather than to the stern behest of duty and entail thereby reproach to ourselves and to the cause we love well.

Sheldon Leavitt, M.D., of Chicago, Ill., was appointed Chairman of the Bureau of Obstetrics for the next year.

The Sectional Meeting in Pædology

was called to order; B. F. Dake, M.D., of Pittsburgh, Chairman of the Bureau, presiding.

The following papers were presented and discussed:

"Infantile Spinal Paralysis—Cases, with Treatment," by C. D. Crank, M.D.

"Post-Diphtheritic Paralysis — Etiology, Diagnosis and Pathology," by Wm. Owens, M.D.

"Forms of Paralysis Peculiar to Early Life," by C. H. Goodman, M.D.

"Post-Diphtheritic Paralysis, with Cases," by R. N. Tooker, M.D.

"Remarks on the Reflex Origin of Certain Disorders of the Nervous System," by Clarence Bartlett, M.D.

"Infantile Spinal Paralysis and its Treatment," by S. Lilienthal, M.D.

(For papers and discussion, see "Report" of the Bureau.)

SECOND DAY.—AFTERNOON SESSION.

The Institute reconvened at 3.45 o'clock, the President in the chair.

The Board of Censors reported favorably on the applications of forty-five physicians and they were elected to membership. (See "Full Report of the Board of Censors.")

Ordered, at the request of the Board of Censors, that the certificate of membership for Dr. Milbank, just elected, be dated back to 1887, as he had filed his application last year and it had been overlooked.

The Address in Surgery

was delivered by John E. James, M.D., of Philadelphia, Chairman of the Bureau.

Following is the address:

In a review of the department of our professional work allotted to this Bureau, we find the events occurring during the last twelve months of a kind, and intimately associated, with the great and unparalleled advances of what is aptly called modern surgery; or, since the announcement by that great surgeon, Sir Joseph Lister, of his theory and practice of antiseptic surgery. So intimate is the relation to the past and so steady have been the advances, that it is not surprising not to find any one new operation or procedure to especially characterize the last year's work.

Yet it has not been a year of idleness, or even one of apparent resting upon past laurels. It has been probably the most important

period of any of equal length in the last decade, because of the more general understanding and acceptance of the true principles that now govern all surgical procedures, though at the sacrifice of many of the prescribed details so rigidly insisted upon but a short time ago, and has resulted in firmly establishing as sound practice much that had seemed but experimental and uncertain. In short, it may be called the time of fulfilment of former prophecies in surgery.

One of the grandest results of modern surgery is the broad field that has been opened up to the skill of the surgeon, thereby greatly enhancing his usefulness and very materially multiplying his responsibilities. So long ago has it been since the barber pole represented the calling of the surgeon, that it had been forgotten but for history; and just as completely will the relegating of surgery to the narrow sphere of simple handiwork, with reference mainly to external condition as injuries, growths or deformities, be at no distant day, a matter of nearly forgotten history.

Now the domain seems to run over into most of the other sections or departments, and takes in many conditions and diseases the true solution of which was classed among the unknown, if not unknowable, from the standpoint of the general physician. Because of the more exact knowledge of the causes of disease, and the more accurate interpretation of symptoms leading to correct opinions as to the site, nature and extent of many diseases heretofore subjected only to medical treatment, surgery has made an advance second only in importance to the great principle of asepsis.

As illustrating this thought, I need only to refer in general terms to what is known as Brain and Abdominal Surgery. While physiology made probable the presence of pressure at certain given points of the brain, the application of the trephine has made certain their exact location and given force to such focal symptoms as lead to a more exact interpretation of the varied symptoms found in these obscure brain diseases, and justifies, nay more, necessitates, the opening of the skull by chisel or trephine for the removal of old as well as recent blood-clots and cysts, the drainage of abscesses and removal of tumors whenever the focussing of symptoms and previous history point out this pressure and location. The great number and varied character of these operations successfully performed, as recently recorded, seem marvellous, and appear to place such hopeless and helpless conditions as epilepsy and paralysis when following a traumatism, as among the surgical diseases and amenable to treatment, thus scoring one more against man's too frequent foe—incurable disease.

In abdominal surgery, that almost exhaustless field, to which so much thought and experimental attention has been given during the past, we find our art has more nearly reached perfection, and has won

brighter laurels than those from any other special field of work. No viscus contained therein but has been successfully attacked for cure, relief or correct diagnosis. Laparotomy, when carefully performed by skilled hands under aseptic conditions, has lost its terror and saved a host of lives. This one operation, performed as it is for so many different causes, has done more to *change* the old so-called axiom "When in doubt wait," and make it read "When in doubt operate," than any other surgical procedure.

To the accepted operations of ovariotomy, hysterectomy and colotomy have been added as equally accepted, gastrotomy, cholecystotomy, enterotomy, exsection of the intestines, etc., and now, as more especially confirmed this year, laparotomy in the treatment of appendicitis.

The papers upon cholecystotomy, intestinal obstructions, and intestinal wounds, by able writers of abundant experience, will be read in full and discussed at the sectional meeting; but the subject of perityphlitic abscess and appendicitis claiming so much attention at this time seems to demand some little mention here, especially as the rule has been to follow the expectant plan until a suppurative peritonitis renders operative interference almost useless.

All inflammations involving the right iliac region are to be regarded as grave, and watched most carefully. When the connective tissue of the cæcum or post-cæcal space has been attacked added frequently to a history of traumatism or secondary inflammation the usual symptoms of pain with heat and tumefaction, pain on moving the limb and a fever increasing rapidly are present, with later a deep, well-defined induration of the right iliac fossa, indicate a perityphlitic abscess which should be freely opened and drained so soon as pus can be detected, or even when well suspected.

When the pain and rapidly developing fever follow marked constipation with nausea, and possibly vomiting, tenderness over a portion of the abdomen with an elongated resonant tumor, the case is one of that comparatively rare condition of true typhlitis, or inflammation of the cæcum, and justifies waiting, so far as operation is concerned, until there is evidence that ulceration with perforation has occurred or a local peritoneal abscess has formed, or, as is more frequently the case, extension by contiguity of structure to the connective tissue outside of the peritoneum and a perityphlitic abscess have supervened.

When, however, the history of previous repeated attacks of sudden and severe pain in this region makes the fact of a foreign substance, such as a ball of hardened fecal matter, seed, cherry-stone or other substance in the appendix vermiformis more than probable, then the gravest consequences are to be apprehended, and necessitates pre-

cautions not heretofore appreciated or understood. A laparotomy under proper precautions, and removal of that apparently useless appendage to our anatomy with its contained foreign substance, at this stage would almost universally be followed by success and the removal of a death-trap. When generally seen, however, the symptoms present are sudden severe pain, often a chill, marked prostration, a gradually increasing fever, no marked tumor or tumefaction or ill defined if at all, which can generally be detected early by an examination per rectum of the cæcal region, or roof of pelvis, followed by local or general peritonitis, then it is nearly certain that you have an appendicitis with perforation into the abdominal cavity, with the only hope for the patient's life depending upon a laparotomy, which should be done at the earliest moment possible, the statistics conclusively proving that delay is most dangerous. Suppurative peritonitis, though unfavorable, does not contra-indicate the operation. It is this danger of delay that has prompted me to speak of the disease here that I might arouse the attention of the physicians rather than the surgeons to the possibility of saving many a patient who but for prompt operative relief will surely die. I feel I cannot urge you too strongly to be on your guard and be as thoroughly prepared for any emergency in this direction as you would for one requiring tracheotomy, or better still, if you are not accustomed to the performance of abdominal section, have your surgeon with you in the case at the earliest hour possible, so that no chance be lost which might be of benefit to your patient. An unnecessary laparotomy is safer than long delay.

Asepsis, or antisepsis as it is usually called, has lost none of its glory when properly applied or confined to its true mission. It is true there has been the same change and counterchange of opinions as to the antiseptic properties of this or that drug, this one popular to-day and that one to-morrow, and many an honest doubt has been thus engendered as to the truth of the theory of antisepsis or the necessity of giving heed to the methods of to-day as to the technique of operations and dressings. The tests of the various drugs upon dead tissue are not sufficient to establish their reliable and certain action upon living tissue, for in the two fields the results do not seem to correspond one with the other. It may be possible, and doubtless is true, that the explanation of the rise and fall of the various antiseptics is that their failure has come from depending upon them as germicides, when it is doubtful if they ever acted as such in any successful case. All attempts to attack the germs through the system, however the germicidal drug may be introduced, have utterly failed, which should not have been true had these powers resided in the drug when present in living tissues. There is no doubt, of course,

of the great success attending upon antiseptic surgery, even though a doubt may exist as to the action of the causes producing such results. During the brief past there has been growing this thought, which to me is a perfect explanation of the successes and failures, viz.: that there is a power residing in healthy living fluids and tissues capable of resisting the destructive powers of germs which are all the time present, so that we inhale, eat and drink these same germs with impunity; they cannot be kept from us, they are not entirely excluded from the wounds under any method of dressing, but when the powers of nature at the seat of injury are properly conserved and when no material organic substance in a state of decay or putrescence is directly introduced by the surgeon's hands, instrument or dressings, nearly all wounds should run an aseptic course and repair by adhesive union—the only exception being when the general condition is too much diseased or too weak to permit of a healthy repair.

More and more as this principle obtains will we depend upon absolute cleanliness instead of this or that special drug. Of all the places in which septic materials are found the human mouth and under the finger nails have been demonstrated to be the places where they are most abundant.

So no operator can expect a good result who does not have his assistants and himself especially cleanse the sub-ungual spaces, in addition to his instruments, etc.

The same change of opinion goes on as to dressings being of wool, cotton or gauze and again whether moist or dry, leaving only as changeless these essential principles, perfect cleanliness, stopping of all bleeding points, perfect drainage from within when needed, always perfect absorption from surface by suitable dressings, and these are things that give nature the best chance to resist the action of septic germs in wounds as in the body. The drugs that have been used as antiseptics and have yielded the best and most certain effects are those which by their pathogenesis are more nearly similar to the condition sought to be avoided, and are used in dilutions similar to those popularly used for internal medication by homœopathists.

S. B. Parsons, M.D., of St. Louis, Mo., was appointed Chairman of the Bureau of Surgery for the coming year. The Institute then adjourned, and

The Sectional Meeting in Surgery

Convened at 4 o'clock; John E. James, M.D., Chairman of the Bureau, presiding. The following papers were presented and discussed.

"Obstructions of the Intestines (except Hernia)," by J. H. McClelland, M.D.

"Wounds of the Intestines." by C. M. Thomas, M.D.

(For papers and discussions see "Report" of the Bureau.)

[The evening of Tuesday was spent by the members of the Institute and their friends in an excursion to Lewiston and Fort Niagara. The excursionists left Niagara Falls at 7.30 o'clock and were conveyed in open "observation cars" along the gorge of the river to Lewiston, at the lower end of the rapids. Thence a large excursion steamer carried them to the mouth of the river and out upon Lake Ontario.

The return was delayed so that a view of the gorge and rapids could be had by moonlight. The excursion was tendered by Dr. A. R. Wright, of Buffalo, N. Y., Chairman of the Committee of Local Arrangements, and the ride was greatly enjoyed by all the participants.

A collation was provided by the proprietor of the International Hotel.]

THIRD DAY.—MORNING SESSION.

June 27th, 1888.

The Institute reconvened at 9.30 o'clock. President Cowperthwaite in the chair.

The Board of Censors presented a further report of names of applicants for membership.

The Report of the Committee on Foreign Correspondence

Was presented by T. M. Strong, M.D. of Ward's Island, N. Y., Chairman of the Committee. It includes a formal Report by the Chairman, a Report by Dr. Eugene F. Storke, of Milwaukee, Wis., and a Paper by Dr. Bojanus of Moscow. The Report and Papers were accepted and referred to the Committee of Publication. They are hereto appended.

To the Members of the American Institute of Homœopathy:

In the division of work of this Bureau the status of our school in Spain and South America was assigned to the chairman. Correspondence with a number of physicians in those sections failed either

to elicit any reply or that there was anything worth reporting in regard to the progress of homœopathy. Examination of journals and other medical matter, so far as they come under observation, would seem to warrant the truth of the above assertion.

The medical turmoil in England has been alluded to in the address of your President, and Dr. Eugene F. Storke sends an additional report on this subject.

Dr. Bojanus, of Moscow sends a paper on "Pharmacological Observations on Hydrophobia." We would recommend that it be received and referred to the Publication Committee.

Respectfully submitted,

T. M. STRONG,
Chairman.

Homœopathy in the English-Speaking Countries and Colonies; by Eugene F. Storke, M.D., Milwaukee, Wis.

The condition of our school in the English-speaking colonies, has remained practically unchanged during the year past. We have many friendly greetings extended to us from our honored brethren abroad.

We have been informed that homœopathy is dead in every country save America. Dr. Oliver Wendell Holmes assures us that it is not altogether defunct in Great Britain. "Traces of homœopathy," he says, "still survive in the Old World, which we have understood was pretty well tired of it."

The invincible spirit of determination which has pervaded England, has compelled her to establish dependencies in every latitude. She has a government prepared for them, and she dominates over all with an iron hand. She has an established government; an established educational system; an established religion; an established eleemosynary institution; an established language; an established system of medicine; and, besides, she has the air of establishment everywhere.

To the distant observer, the air of solidity seems impermeable, and the established institutions almost impregnable. But such is not the case. The spirit of liberty, like the "worm i' the bud," is eating at the heart of British arrogance. The established government is slowly and surely tending to that of a republic. The established educational system was obliged to conform itself to the necessities of the hour. The established religion had to adapt itself to the religious needs of the people. The established charities were governed by the wants of the suffering classes. The established English language has, by slow and silent accretions, become polyglottic. The English

people have become cosmopolitan. The established school of medicine is where the anti-progressive party is to be found.

At last we have hopeful indications that the homœopathic leaven, long since placed in the dough of the dominant school, will exert a wholesome influence on the whole mass.

The most noticeable indication of the present vital activity of our profession in England, has been clearly shown in the recent discussions carried on through the columns of *The London Times*, on the suggestive topic, "Odium Medicum and Homœopathy." This has received the utmost attention from the profession, the laymen, and the press. As usual, the bigotry and intolerance of the dominant school have prompted them to angry assertions, and contemptuous epithets. As the reddened rays of anarchy's vile flag kindle a martial spirit among the lower classes, so does homœopathy intensify all the bellicose nature and arrogant bigotry which the regular medical Briton of to-day has inherited from his ancestors of the middle ages.

To our own aggrandizement, our opponents never keep a dignified silence. They attack us on grounds that are non-essential. They fight us as they do disease,—in name only; to the intelligent layman, they exhibit an ignorant prejudice against, instead of a scientific acquaintance with, the new school. Hence the laity conclude that the regular Briton is opposed to us on foolish grounds.

The *London Times* discussion has elicited three facts:

1st. That the medical opposition to the new school is due to prejudice, instead of philosophic research.

2d. That the laity have been led to display a new interest in our medical heresy, and they complain that in the discussion "We laymen have not had that assistance from our orthodox brethren, or rather friends, which we might have expected."

3d. That the press are disposed to accord to us a reasonable hearing, and to allow us a chance for life.

From different English laymen, I learn four other facts:

1st. That homœopathy in the motherland is necessarily a post-graduate course. It pre-supposes that its representatives are men of equal culture with their rival brethren, with the addition of the supplementary study of homœopathy. If, then, one is a quack, must not the other occupy debatable ground?

2d. "That homœopaths do not offer any explanation or hypothesis." "Their rule leads them to the choice of the right drug for a given case." In fact, they cite our love for practical results, rather than theoretical cavilling.

3d. That homœopathy has gained a firm hold in England during the present century. Notwithstanding this quackish growth, the span of human life has been lengthened by six years.

4th. That homœopathy says, "We don't know exactly what Nature is trying to do, but let us give her a little help, and trust in luck." "Whereas," our informant continues, "Allopathy pretended to know everything, and to fight Nature."

From everywhere we see a cheering prospect. We feel that our truths are sinking deeply into the public heart. We know that they are being slowly absorbed and assimilated by the entire profession. We believe that:

"Secure we wait the day,
As watchers wait the morning light;
The false alone need dread the day,
For time will only strengthen RIGHT."

Pharmacological Materials for the Treatment of the Bites of Rabid Animals; by C. Bojanus, M.D., Moscow, Russia.

Nepigeat explebegis sciscitari si quid ad curationem utile est.—HIPPOCRATES.

At the present time, when tropathy, presented under a new form, has been introduced by Pasteur as an infallible remedy against canine rabia, the therapeutics of this disease may be considered an interesting question of the day; and this has induced me to undertake, not only the revision of the remedies at our command in the treatment of rabia, but to direct the attention of the reader to the popular remedies which have not only acquired a certain renown, but have proved, in the experience of myself and others, to be founded on the laws of similia.

The activity reigning in America in the field of homœopathy, and the number of physicians enlisted in its ranks, give me the hope that this precious material will receive due attention, and this the more, because our therapeutics in the treatment of hydrophobia may be still considered as far from satisfactory. There is hope, however, that further study will enable us to contend with the disease, when developed, and to master it with our therapeutics as successfully as with our prophylactic treatment.

These are the reasons which have induced me to forward the present article, in which I have gathered all the materials at my disposal with as much precision as lay in my power.

Mr. Kryloff, whether a landed proprietor or a doctor, we do not know, mentions in a pamphlet, published in 1868, that two of his neighbors, Drs. Kuhnen and Kuppe, in the district of Vereisk, government of Moscow, were engaged in the treatment of the peasants of that district, and that they were particularly interested in the treatment of the bites of rabid animals; in the same pamphlet the author gives a list of the different remedies which are used and

have acquired a certain renown in many parts of Russia in the treatment of hydrophobia, adding, at the same time, that though these remedies cannot be relied upon without scientific grounds, nevertheless, in the treatment of the bites of rabid animals, *popular remedies have been often applied with the happiest results.* These remedies are the following: Aconitum luteum, Alisma plantago, Anagallis arvensis, Atropa belladonna, Calla palustris, Cetonia aurea, Datura stramonium, Euphorbia villosa, Euphorbium palustre, Euphorbium peplus, Gentiana amarella, Gentiana cruciata, Gentiana pneumonanthe, Gentiana campestris, Genista tinctoria, Hieracium pilosella, Inula ensifolia, Lotus corniculatus, Lythrum salicaria, Lytta vesicatoria, Marchantia polymorpha, Meloe majalis, Talictrum flavum, Scutellaria lateriflora, Scrophularia nodosa, Spiræa ulmaria.

We will communicate what is known of the action of these remedies from the different sources at our disposal.

Aconitum luteum. Germ., Wolfskraut, Wolfzwurz, Fuchswurz, Wolfseisenhut. French, Tue-loup, cape de moine.

Its leaves are used as a mixture with the solution of Loti corniculati. (Kryloff.)

Its action in hydrophobia is considered surer than that of Gentiana campestris and Cuscuta. (Pallas I., 50.)

In the governments near the Volga it is used as a prophylactic remedy against hydrophobia. One gives the patient, who has been bitten, about a drachm of powder pounded from the root, on bread, in milk or honey. The wounds are also covered with the powder two or three times a day. (Nelubin.* Deriker.) (The quotations of Deriker are taken from the Journal of Homœopathic Treatment, published in Petersburgh, in 1863.)

Alisma plantago. Germ., Froschlöffel, Hasenlöffel, Waserwegerich, Wasserwegebreit. French, Plantain d'eau.

The roots are gathered at the end of August, washed in water, and dried in the shade. One large root or two or three small ones must be pounded and given on bread and butter to the patient bitten by a rabid animal. Two or three doses are sufficient to destroy the poison. (Kryloff.)

In a report of the Medical-Surgical Academy of Vilna, a plant named Hieracium pilosella is mentioned as a remedy against hydrophobia, known in the western governments of Russia. (Journal, Friend of Health, 1839.)

In the government of Toula it is considered most efficacious in

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* Late Professor of pharmaceutics at the Medical-Surgical Academy of Petersburgh.

cases of hydrophobia. A powder of two drachms out of the root is taken with bread every day during six weeks. Its efficacy has not been proved by any physician. (Nelubin.) Used in Little Russia against hydrophobia (Journal of Medical Science, 1811, No. 1) three times a day, a powder of 10–15 grains of the root. The same has been reported to the Medical-Surgical Academy by Mr. Tourgueneff, from the government of Toula, where the plant is called Alisma plantago. (Journal of Medical Science, 1816, No. 6. Deriker.)

In the Moscow *Gazette*, of the 11th of January, 1887, is inserted a communication of a priest, Kraskoffsky, about the successful treatment of patients bitten by rabid animals, with the Alisma plantago. He says that, thanks to this remedy, used in his family from generation to generation, a number of people have been cured; and that the doctors of the neighborhood do not doubt its efficacy. The plant is used in the following manner: A fresh or dried root is given to the patient (the cooked root or a decoction has no effect), who chews it and spits out the saliva; the drug is taken during certain phases of the moon, particularly during the new and full moon (the day before, the same day and the following three days of each phase). The treatment continues no less than two full moons, even if the wound is healed, and if very deep, it is continued till the cure is complete. Several cases are mentioned about men and animals having recovered their health, so that in the whole neighborhood no cases of hydrophobia have been heard of for some time.

A proprietor of the government of Riazan makes use of a mixture of herbs in which the root of the Alisma plantago plays the principal part.

The mixture is composed of the following plants: Alisma plantago, Genista tinctoria, Origanum vulgare, Campanula rotundifolia. In a pamphlet entitled, "Remedy against Hydrophobia, applied by Mr. Levashoff, proprietor of the government of Riazan, who communicated his secret to the Grand Duchess Helen of Russia, with whose permission the Remedy is published," Moscow, 1861. Directions are given about the gathering of the plants, the composition of the mixture, the administration of the remedy, according to the ages of the patients, but no cases of recovery are mentioned. We must suppose, however, that the treatment acquired some renown if the secret was communicated to the Grand Duchess Helen, as mentioned in the title of the pamphlet. A mixture of different remedies does not give us the right of judging of the effects of each particular plant, but we have mentioned this treatment as the

Alisma plantago has acquired the same renown in other parts of Russia.

Anagallis arvensis. Germ., Rother gauchhiel, Faul lieschen, Rother hühner oder hennedora. French, Mourou couge, Morgeline.

This remedy, commended by Rufus and Cartheuser, has given brilliant results in the treatment of the bite of rabid animals, so that the Prussian government ordered it to be applied in such cases (Kryloff). In the western governments it is used against hydrophobia. (Friend of Health, 1839. Deriker.)

Atropa belladonna. The German clergyman Minch used the Atropa belladonna as a remedy against the bite of rabid animals. Roots of two years are extracted before the plant flowers; they are washed and dried in the wind or in a stove—they are not to be dried in the sun. They are pounded and put into bottles, well-corked, and kept in a dry place. The leaves are gathered when the plant is beginning to blossom, dried and kept in boxes well closed. When the leaves are used instead of the roots, a double portion is required, the action of the leaves not being so strong as that of the root, which produces perspiration and even swelling of the wound; it diminishes after the second dose and disappears completely after the third. A strong pain in the wound appears sometimes. The powder is to be taken till the pain passes away and the wound is healed; if the pain continues the dose must be doubled.

The powder is to be taken every second day; if after the third dose the wound continues swollen, the patient is to take five powders of the leaves, a dose every second day. Two hours beforehand, the powder must be dissolved in water. If after the first dose, a violent diarrhœa appears, the second dose must be stopped till the diarrhœa ceases. Every dose is 1–5 grains for children; to adults beyond the age of 17, 10 grains for the first dose, and 14 for the last. (Kryloff.)

According to Hahnemann, the surest prophylactic treatment of hydrophobia is Belladonna, given in small doses every third or fourth day, and later on at longer intervals.

Hartman describes the following symptoms for the application of Belladonna in hydrophobia: a vain but strong wish to go to sleep, anxious respiration, a burning uncontrollable thirst, pushing away the drink when offered, a swollen, red face, sparkling eyes, choking with violent thirst, impossible to swallow, terror, alternating with a wish to bite those that are present, spitting on all sides, a wish to run away, bustling disposition, uneasiness and constant movement with the whole body.

Calla palustris. German, Weisser froschlöffel, Schlangenkraut, Schweinekraut, Draehenwurz, Klappen wasser schlangenkraut,

Wasserpfeffer, Wasseraron, Wassernatterwurz. French, Calle de marais, Serpentaire d'eau.

Dr. Dubeleffsky, in the government of Minsk, made use of the Calla palustris in the treatment of men and animals bitten by rabid beasts. (Kryloff.)

Dr. Dubeleffsky frequently and successfully applied the root of this plant in the treatment of men and animals bitten by rabid wolves and dogs, and the patients remained free from any dangerous symptoms.

The fact has been confirmed by other doctors and proprietors of the government of Minsk, who gained the same experience. 5–10 grains of the pounded root are taken every morning and evening during three days, and the doses are repeated at every phase of the new moon, during two or three months. (Friend of Health, 1839. Deriker.)

Cetonia aurea. Scarabacus auratus.

A military physician, Dr. Otto Wagner, applied the golden beetle in the treatment of the bites of rabid animals; it is considered a first-rate remedy in the government of Saratoff. The beetles are collected in May and June, in the ant-hills of the large species (formica herculæa); they are found at the bottom and near the walls of the ant-hills in a chrysalis state, incased in hard, rough shells, having the form of a nut; they are put in pots tied up with paper, in which holes are pricked to let the air pass, and the pots are placed in the sunshine to the south. When the beetles come to life they are killed; it has been remarked that at this period the characteristic odor which belongs to them is at its strongest, and Dr. Wagner supposes that the intensity of their curative power depends upon the strength of this odor. The beetles are kept in well-corked bottles and collected every year. They are taken in powders, sprinkled on bread and butter, or dissolved in milk. One of the symptoms of the action of the drug is a long sleep, which ought not to be interrupted; the stronger the disease, the longer the sleep continues; it lasts sometimes a day and a half; the patient awakes without any impression except that of a general weakness in his limbs; those that take the drug immediately after having been bitten do not feel any symptoms except drowsiness. (Kryloff.) During my service at Nijny Novgorod, as physician to the estates of the imperial family, from 1853 to 1863, the apothecary, Mr. Evenius, collected the chrysalis of the beetles mentioned by Kryloff every year and applied them with success in the treatment of the bites of rabid animals; he was a thoroughly honest man and his word could be safely relied upon; Mr. Dahl, under whose orders I served, had also great faith in the remedy. (Referer.)

Datura stramonium. Kryloff mentions this plant as used in some parts, but enters into no details on the subject. Hahnemann says that according to the symptoms of hydrophobia and their likeness to the pathogenic symptoms of the corresponding drugs, Belladonna, Hyoscyamus and Stramonium may be applied in the disease.

Hartman gives the following indications for Stramonium: Tossing, violent convulsions with tetanus, unmanageable rage so that the strait jacket becomes necessary, sleeplessness, tossing with piercing screams, loss of memory and consciousness, dilated pupils, great desire to bite and to tear everything with his teeth, dryness of the mouth and throat, violent convulsions at the sight of fire, water or a mirror, invincible aversion to water, with convulsions and choking in the throat, foaming at the mouth and frequent spitting.

Euphorbia villosa sive silvestris. Germ., Haarige euphorbie. A decoction from the root is taken several times a day, one wineglass for every dose, and is considered a most efficacious remedy against hydrophobia; this was kept as a secret by a family of peasants in the government of Volynia and communicated to the Society of Russian Physicians by a priest named Benderoffsky (Friend of Health, 1839). In the governments of Podolia and Volynia and in Galicia the plant has been known for several centuries as a remedy against hydrophobia. A decoction is taken internally and applied externally. The patients who are infected get fits of vomiting; those who are not infected are simply dizzy. In the government of Kieff, Euphorbia palustris and Euphorbia cyparissias are used (Krebel, Deriker).

Dr. Kaczkowski, who died not long ago at Lemberg, in Galicia, treated in 1867, in the town hospital, 15 patients bitten by rabid wolves with a decoction of the Euphorbia villosa s. silvestris. He gives a long description of the plant itself, and of the whole course of treatment of his patients.* Out of 15 patients, two died from hydrophobia which had developed in the beginning of the treatment; one died of typhus, as was proved by the autopsy.

The popular receipt for the preparation of the drug is as follows: The root is gathered in the month of May, chopped into small pieces and put into a clay pot, the roots filling three-fourths of the pot; the fourth part is filled with spring water; the pot is covered with a lid and plastered with clay, then placed for 12 hours in a temperature of 36° to 50° Reaumur; the decoction is then strained and kept in bottles under the name of No. 1. Some more water is poured upon the remaining roots, and treated as the first; the decoction is then strained and kept under the name of No. 2. No. 1 is taken

* Allgemeine Homöopatische Zeitung, vol. 80, p. 121, 129, 184, 153, 169, 185, 201. Vol. 81, p. 25, 33, 41, 59, 86, 107, 162, 172, 179, 184, 195, 204.

internally and No. 2 used to wash the wounds and to dampen the compresses applied to the wounds. No. 1 is taken every morning when fasting during 5 days; children take 1 to 2 tablespoonfuls, young people and delicate women 3 to 4 spoonfuls, and adults 6 spoonfuls. After having taken the drug the patients have a feeling of warmth in their stomachs, after that, nausea, vomiting with or without diarrhœa, or diarrhœa alone. The wounds are washed with No. 2 diluted with water, and if the suppuration is strong, compresses dampened with No. 2 are applied. Dr. Kaczkowski found the popular preparation of the drug inconvenient and taking up too much time. He prepared two tinctures, No. 1 and No. 2, with spirits, according to the homœopathic pharmacological rules. He gave 5 to 10 drops of the tincture No. 1 to children, 10 to 20 drops to young people, and 20 to 30 to adults; the tincture was diluted in two tablespoonfuls of water, the success of the treatment depending, as well known, on the length of time which had elapsed since the patient was injured. It has been noticed that when the treatment begins the 7th, 8th and 9th day after the accident, not every patient is preserved from hydrophobia; once the disease has broken out, the drug does not act, as has been proved by the two deaths reported by Dr. Kaczkowski. As to the physiological and pathogenetic proving of the drug, Dr. Kaczkowski says that his numerous occupations prevented him from proving the drug to the full extent of its action.

After having taken 5 drops of the tincture No. 1, he felt burning and heat in the throat and stomach during half an hour; the same dose repeated after three days produced the same feeling without any alteration in the general state of health; 30 days later he took ten drops in two spoonfuls of water. The feeling of heat and burning in the stomach was much stronger and was accompanied with nausea and inclination to vomit; the same dose (10 drops) repeated 10 days later, produced the same symptoms with a feeling of weakness in the whole body. It is remarkable that Euphorbia called forth very similar symptoms to those experienced by myself in proving Spiræa ulmaria in 1852; burning and heat in the throat and stomach. It is not astonishing that other remedies, that have acquired renown in the treatment of the wounds caused by rabid animals, have the same symptoms; it is the characteristic of all the remedies that have any relation to hydrophobia, and it would be therefore most suitable to the end in view to prove them on healthy subjects. This would be the task of a whole group of physicians, as individual experiments are insufficient to develop the action of the drug to its full extent, so as to give accurate therapeutic indications. The article of Kaczkowski is too long to be extracted; any one interested in the subject will find it instructive and may feel encouraged in repeating the experiment.

Euphorbia nicacensis. In the journal "Nature and Sport," February, 1887, the treatment of hydrophobia is mentioned in the following terms:

"In looking over some old journals, I found in the 'Russian World' for 1880, No. 12, a curious note concerning the treatment of the bites of rabid animals. The editor speaks of the action of Euphorbia in the treatment of hydrophobia, and mentions a lady, Mrs. Mikluha-Maklay, who had the opportunity of convincing herself of the efficacy of this drug (Euphorbia nicacensis) and had the satisfaction of saving from certain death a great number of persons bitten by rabid animals. Unfortunately, notwithstanding the energetic exertions of Mrs. Mikluha-Macklay during several years, none of our physicians could be moved to try any clinical experiments to prove the efficacy of Euphorbia in the treatment of the bites of rabid animals; there has been nothing but wicked indifference and positive opposition on the part of our medical authorities, who treat with the same contempt every remedy that does not proceed from their own immediate authority, although its benefits may have been confirmed by innumerable facts."* L. VESSINE.

Euphorbium palustre. In the clinical experiences of Rückert (Rückert, Klinische Erfahrungen, vol. iv. page 626), we find a communication of Dr. Sonnenberg, who mentions, on the authority of a certain Dr. L., the happy results obtained by Euphorbia palustre, not only in the prophylactic treatment, but in that of hydrophobia already in the stage of development. This remedy was frequently applied by a peasant of Galicia. The fresh root is crushed, warm water is poured over it, and it is put for twelve hours in a stove to stew; the liquor is strained and preserved for use; several spoonfuls are given to the patient during three days; the dose varies according to age and constitution. The wounds are bathed during nine days with a decoction obtained by pouring fresh water over the roots that have been used for the first brew. The preparation is about the same as described by Katezkoffsky. Is there not a mistake in the botanical name of the plant?†

Euphorbia peplus. Germ., Rund blättrige, Euphorbia peplus, Wolfsmilch, Hundsmilch, Teufelsmilch.

A small quantity of the dried and pounded root with bread is a remedy against hydrophobia, published by Mr. Zaroudni, who became

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* Although we have no reason to suppose that the author is a homœopathic physician, his reproach is in harmony with our own experience and convictions. —(Ref.).

† It would be necessary to consult a botanist to classify the different plants belonging to one family, and to avoid any mistake there ought to be engravings of the plants published, so as to serve as a guide to those who will prove the drug.—C. B.

acquainted with it in the government of Kharkoff from a peasant. Its efficacy seems to have been proved by numerous experiments. (Journal of St. Petersburg, 1860, Agricultural Journal, Deriker.)

Gentiana amarella. An apothecary named Gauger mentions in his "Repertorium für Pharmacie," that a man in whom he had great confidence brought him a plant used in Little Russia as a remedy against the bites of rabid animals. The plant proved to be the Gentiana amarella. The man assured him that this plant even cures dogs, who were attacked for the second time by fits of quiet madness. A teaspoonful of the plant reduced to powder is given with bread to the dog, till it begins to drink, which is a sign of recovery (Kryloff).

Gentiana cruciata. Germ., Heil aller schaden. French, Croisette. Kryloff only mentions the name. It is considered a useful remedy against hydrophobia and is taken mixed with the Marchantia polymorpha. (Friend of Health, 1831.) In the report of the Medical and Surgical Academy of Vilna, it is mentioned that both plants are not used in medicine; the same is said of the Hieracium pilosella. However, two years ago, the Austrian government published this remedy with instructions for use. The root is pounded in a mortar with water. The strongest dose is 25 grams; the doses vary according to the disease and constitution of the patient. The drug is taken during a period of nine days' fasting. (Northern Post, 1861. Deriker.)

Gentiana pneumonanthe. In Siberia and other parts this plant is used as a preservative against hydrophobia. It is taken either in powder or in a decoction. (Nelubine, Deriker.)

Gentiana campestris s. pratensis. Germ., Blauer Dorant. In the district of Arzamas, government of Nijny Novgorod, this plant is considered a sure remedy against the bites of rabid dogs (Pallas). It has been recommended in the seventeenth century against hydrophobia. In Russia and other countries it is considered a specific. In 1840 Lalié (Medic. Jahrb. XXXII) called attention to this drug. He gave one-quarter of an ounce of the pounded root during nine days. In the government of Perm, Gentiana pratensis is taken against hydrophobia during several weeks, morning and evening, half a drachm of the pounded root or a decoction. It calls forth strong perspiration. (Krebel, Deriker.)

Genista tinctoria, glutea tinctoria. Germ., Färberginster, Gilbkraut Ginster, Ginst. French, Genit genestrolle, Herbe à jaunier. Dr. Maroketti, during his residence in Little Russia, heard from a peasant of this remedy against hydrophobia. Both he and Dr. Listoff observed that patients who had been bitten by rabid animals suffered from small blisters under the tongue. The peasant made his

patients take a decoction of Genista glutea tinct., and as soon as a blister appeared, he pricked it with a red-hot iron needle, and had the mouth well washed out with the decoction. The patients had to take the decoction internally during six weeks after the blister had been pricked. The thick parts remaining after the liquid had been strained, were applied to the wounds. Dr. Maroketti cured 40 patients by this system. Dr. Magistrel, to whom the French medical authorities communicated this mode of treatment, found it unsatisfactory.* He tried the treatment two and four days after the accident. At present the blisters are not recognized as being of any importance. In Little Russia both the drug and the red-hot iron are frequently applied. (Medico-topographical description of the districts of Grodno, Tchernigoff, and Sosnitzk by Boulgakoff.—Military Medical Journal, 1827.) The inhabitants of Moldavia and Valachia prick the blisters that appear under the tongue of those who suffer from hydrophobia, although they do not consider the blister as an obligatory symptom for every patient; abundant bleeding is considered the best remedy. (Medico-topographical description of the principalities of Moldavia and Valachia; Military Medical Journal, 1834; Schorstein, Friend of Health, 1838.) Dobronravoff certifies by his own personal experience, that the blisters really exist and that the treatment is efficacious. Kamensky, in Kisheneff, says that burning with a red-hot iron under the tongue is applied in Bessarabia no less frequently than in Little Russia, but different drugs are taken. He denies the existence of the blisters and the efficacy of the method. (Friend of Health, 1838.) Genista tinctoria is mentioned in the report of the Medical and Surgical Academy of Vilna as one of the remedies applied against hydrophobia in the western governments. (Friend of Health, 1839.) In the government of Varonéj it is given to the cattle as a prophylaxis to hydrophobia, being mixed with the food. (Deriker.)

Hieracium pilosella. Germ., Nagelkraut, Maüseöhrlein, Habicht kraut. French, Epervière piloselle, Oreille de rat, Oreille de souris.

A gentleman of the government of Novgorod, Mr. Trouskoffsky, treated hydrophobia with this plant. It was gathered when in blossom, or after it had blossomed; the root was dug out with a wooden spade, the dirt cleaned off, but the root not washed; the whole plant is dried in a warm stove, pounded, and kept well sealed in wooden boxes. A tablespoonful of the powder has to be boiled in five glasses of water till only three glasses remain; a third part of the decoction in taken every day during three days; it has to be well mixed and

* Mémoire sur l'hydrophobie. Journal de l'hôpital de Bourbay par M. Magistrel, 1823.

not strained, so that the powder is taken with the liquid. The medicine must be prepared two hours before the sun rises. The cattle take the powder mixed with their food or with bread, and they are not to be fed for five or six hours after taking the drug. Human beings must abstain from liquors and meat for two or three weeks. (Kryloff.)

In a communication of the Medical-Surgical Academy of Vilna, about the method of Mr. Trouskoffsky, the committee reported that, having examined the plant, they decided that its efficacy has to be proved by experiment, as it had never been mentioned before; the remedy is published to give the means of proving its action on rabid animals. (Friend of Health, 1830, 266.) According to the method of Trouskoffsky, a tablespoonful of the whole plant dried and powdered is cooked in a pot with water; about two bottles of the decoction are divided into three parts and taken during three days, the liquor not strained but mixed with the herb. In Poland it is used in the same manner. (Kossakowsky, Deriker.)

Inula ensifolia. Germ., Schwerblättriger Alant. Used in the government of Poltawa. (Kryloff.) Against hydrophobia in the government of Poltawa. (Deriker, Friend of Health, 1839.)

Lotus corniculatus. Germ., Schattenklee, Schneckenklee. French, Lotier.

Dr. Marx recommends Lotus corniculatus in cases of madness caused by the bite of rabid animals. Three or four glasses of a brew made of the herb is taken; when a slight swelling of the lower jaw is noticed, preventing the free movement of the tongue, several incisions are made under the tongue with a sharp lancet; the mouth is rinsed with strong vinegar until the blood stops; a few days later the decoction is taken again. The plant is prepared with the leaves, flowers, and unripe seeds; a small quantity of the flowers of Aconitum luteum is added to the brew. (Kryloff.) A powder made of the dried plant has been long used in cases of madness caused by the bite of rabid animals. Two doses are taken; one at the beginning of the disease, the second after a month. A tablespoonful for adults, a teaspoonful for children. Dr. Marx gave with great success a brew mixed with Aconit. luteum, 3–4 glasses during several days. (Krebel, Deriker.)

Lythrum salicaria. Kryloff mentions this plant as a remedy against the bite of rabid animals, but gives no details. In the government of Mogileff it is a remedy well known against hydrophobia. The treatment lasts three days; the doses are repeated three days before the new moon, and three days before the full moon. The wounds are washed with salt and vinegar. (Deriker.)

Lytta vesicatoria. Spanish flies. By the method of Galin, three

Spanish flies and five corns of pepper are ground to a fine powder; the patient takes the powder in four ounces of white wine, and abstains from salted food for three days. The doses are regulated by the age of the patient; children from 7 to 10 take one-third of the powder; the dose is doubled at the age of fourteen; adults take the whole powder. If, on the first day, the urine is mixed with blood, it is a good sign, and the disease will pass of itself. (Kryloff.) Hartlaub and Trinks say that Rust observed that all the patients bitten by rabid animals, who had followed this treatment prophylactically, had never suffered from hydrophobia; but the treatment of the wound was not always successful. Dr. Axter, a physician of the hospital in Vienna, confirms the same opinion. Rust cured with Cantharides a patient who had all the symptoms of hydrophobia and could not swallow. Axter cured three patients with all the symptoms that precede hydrophobia. According to the opinion of Hartlaub and Trinks, Cantharis is the surest prophylactic remedy, if taken in time, that is to say, shortly after the infection. A drop of the 15th dilution is taken every third or fourth day. The wound is bathed with warm water and covered with a dry compress. The danger has passed as soon as the wound is healed and is covered with skin of a natural color; a bluish tint proves that the infection is not destroyed. In hydrophobia, in most cases, the choice of the remedy falls on Cantharis, as it is a drug in which we find a great many corresponding symptoms. Hartmann does not take upon himself to decide about the action of Cantharis in the prophylactic treatment; his opinion is, that the remedy corresponds to the form of hydrophobia where the difficulty to swallow depends upon an inflammatory state of the throat, and does not proceed from cramps; also in cases where the disease is accompanied by priapism. (Rückert, Klinische Erfahrungen, Bd. 18, page 621–22.)

Marchantia polymorpha. Kryloff says that he can give no certain facts in favor of this remedy. It is considered efficacious in hydrophobia, and is given mixed with Gentiana cruciata. (Friend of Health, 1839, 267, Deriker.)

Meloe majalis. Certaria aurata. Germ., Maikäfer. May-beetle. In some parts of the government of Vitebsk the May-beetle is considered an efficacious remedy for curing the bites of rabid animals. It has been known for more than two centuries. In the book of Matthias Martini (Armer Kranker Noth, Frankfurt, 1676) it is said: "Do not take the May-worm with your hand, but with paper; put it into honey and leave it there; give the honey to the patient in beer; put some honey on the wound caused by the rabid animal." The popular remedy is taken till now in the same manner; the insect has to be swallowed with the honey by grown-up people; children

take the honey alone. (Kryloff.) The May-beetle is given in powder in Little Russia to those who have been bitten by rabid animals. (Boulgakoff.) The remedy is well known in the government of Vitebsk. In December, 1858, a merchant of Polotzk, named Skvortroff, presented a note to the Medical Council, with a certificate of his successful treatment of hydrophobia; he collected the insects himself and kept them in honey taken from the bee-hive without wax. The May-beetle was used against hydrophobia in the seventeenth century, and then quite forgotten. The beetle taken internally causes a strong pain in the bowels and kidneys, difficult urination, tenesmus of the bladder, vomiting, anguish, inflammation of the intestines, gangrene of the stomach and intestines, and even death. The Vienna Professor, Hartmann, says, that Meloe majalis is an exciting remedy, though not so much so as the Spanish fly. Klikerman assures the contrary; he used the remedy in dropsy and retention of urine. (Friend of Health, 1838; Berliner Central. Zeitung, No. 34, 1838.) Dahl says: "I succeeded in getting this insect from the governments of Tver and Saratoff, where it is used as a popular remedy against hydrophobia; it is a golden-green beetle, with white spots, commonly called the May-beetle, known to the naturalists under the name of Certaria aurata; it is found in ant-hills in the woods; I do not know how it gets there, but in spring it clings to the wild rosebushes." Enegolm says (Journal for General Medical Science, 1811, No. 1) that the Prussian king, Frederick II., paid 6000 thalers to a Silesian peasant for a secret remedy, which proved to be the Meloe majalis, and was applied with good results in hydrophobia. The same author adds that Spanish flies ought to be also tried in this dreadful illness, as it is very similar to the tetanus in which Samuel Brown used a tincture of Spanish flies with great success. In the government of Saratoff, and the neighboring governments, Certaria aurata is considered a sure remedy against hydrophobia. The insect is dried and pounded, and taken with butter or honey or simply with bread. One beetle is taken immediately after the patient has been bitten; in other stages of the illness, and on development of hydrophobia, 2 to 4 insects are taken. The patient often falls into a heavy sleep, that lasts sometimes thirty-six hours. The calmer the sleep, the more chances of his being cured. Those that have been freshly bitten generally only feel a slight drowsiness; when the illness is strongly developed, and a large dose has been taken, the sleep is more profound. (Observations of Wagner; Krebel; Deriker; Cetonia, v. Neue Zeitschrift für hom. Klinik., II., p. 15.) It is evident that Kryloff considers the Cetonia aurea and Meloe majalis as two distinct species of the beetle; with Deriker, the Meloji majalis and Cetonia aurea appear synonymous. An experi-

enced entomologist ought to decide which of them is right; I do not take it upon myself, but have found in the Encyclopædical Dictionary of Brockkaus (Conversationes lexicon) that the Cetonia aurea (Gold Käfer) is the beetle described by Kryloff, but that the May-beetle spoken of by Deriker, and named Meloji majalis (Mai Käfer) is another insect, Melolontha vulgaris.

Talictrum flavum. Kryloff only says that it is used in the government of Tamboff.

Scutellaria lateriflora. Kryloff only mentions the name.

Scrophularia nodosa. A priest named Lissetzky treated men and cattle bitten by rabid animals with this plant; it grows in woods, ditches, between bushes, on meadows, and in damp and shady places; it blossoms from July to August. There are different species of the plant, but the one that grows in the northern and moderate climates has a very thick root with excrescences of different sizes; the smell is disagreeable, the taste bitter; it is dried in the sun; before using the root little bits are cut off, washed, and dried on a hot frying-pan, pounded, and given to the patient morning and night; the powder, as much as can be taken on the point of a knife, is dissolved in a tablespoonful of water; the leaves and flowers are finely cut up and brewed in water; a pinch is sufficient for three glasses of water; the liquid is taken twice, morning and noon, during eight to fourteen days; the wounds bathed with salt water. (Kryloff.)

Spiræa ulmaria. Regina prâti. Barba caprina. Germ., Sumpfspierstaude, Wiesenwedel, Wurmkraut, Johanniswedl, Wiesengeisshart, Wadesüss, Schwulstkraut, Mälkraut, Krampfkraut, Blutkrautwursel, Wiesenkönigin. French, Spirée Ulmaire, Ulmaire reine des près, Chêvre des près.

The first medical notions about the action of Spiræa in hydrophobia were communicated by Dr. Kuhnen, who inhabited a village of the district of Vereisk, in the government of Moscow; he edited, in 1844, a small pamphlet describing how he became acquainted with the remedy, and how he applied it in the treatment of hydrophobia. We transmit his own words:

"I was bitten, in 1832, by my own dog, which had grown mad; my hand was deeply wounded in several places; the dog was immediately shut up, and died after three days with all the symptoms of madness. I knew by the experience of many celebrated physicians how unsatisfactory were all the remedies generally used in the treatment of hydrophobia and bites of rabid animals; I therefore sent to fetch a peasant who was well known for his successful treatment of the disease. He gave me a fresh root chopped (he always gave it fresh, winter and summer), and he ordered me to take a teaspoonful every morning during three days. Twelve years have passed, and I

never felt any consequence of the accident. It is natural that I felt interested in the root; the peasant showed it to me very willingly; it was the Spiræa Ulmaria; since then I have used this remedy with the greatest success in the treatment of bites of rabid animals; I always use the fresh root, having never tried it dry.

Thanks to the general carelessness of the surrounding inhabitants, we had a great many mad dogs in our neighborhood, and I had them chased away by my own dog, which was very strong. It got frequently bitten, and after each battle my dog had to take three doses of the fresh root of the Spiræa and kept well for many years. Having grown convinced of the excellent action of Spiræa through repeated experiments, I recommended the remedy to my friends and acquaintances and was happy to hear of the same good results; this is the reason why I thought it my duty to publish the fruits of my experience and to acquaint the public with a remedy which has proved so beneficial in a most fearful disease. In 1852, after the death of Dr. Kuhnen, a second edition of the pamphlet was published by a Mr. Schibaeff, who says in his preface: "The pamphlet of Dr. Kuhnen, published in 1844, has been looked over and enlarged by himself; it is now re-edited. In September, 1850, the author personally communicated to me the following details: The servant of a neighboring proprietor was brought to him with all the symptoms of hydrophobia; two strong men could hardly restrain him; he had a fixed vacant look; he struggled with his keepers and presented a complete picture of fully developed hydrophobia. Although Dr. Kuhnen was not convinced of the action of Spiræa in such an advanced stage of the disease, he immediately sent for a fresh root and after having washed and cleaned it gave it to the man, who seized it and swallowed it with the greediness of a savage beast; he did the same with a second root, which was given to him, and ate half of a third. The keepers held him the whole time, but Dr. Kuhnen made a sign that they should leave him free; his face had already changed, the vacant look had disappeared and he grew calmer. After a quarter of an hour, the patient said with difficulty; "Oh, how thankful I am to you!" After that, he was put into a cart and taken home to a village at the distance of about five miles; he fell asleep on the way and did not awake when brought home; he was left in the cart and slept till late in the evening; he awoke groaning and in great anguish, saying that he felt very unwell and that he was going to die. After that he had a severe fit of vomiting of bile; with the bile, he vomited some dark green lumps, but to the general astonishment there were no traces of the root of the Spiræa; after vomiting he fell into a profound sleep and woke the next morning, feeling quite well. This wonderful cure induced Dr. Kuhnen to try the remedy with a girl who suffered from epilepsy since childhood. A week before the

attack was expected the patient took three cups a day of a strong decoction made of the root; the following attack was much weaker than usual; the next month passed without any attack; the patient felt general uneasiness and an uncomfortable feeling; instead of the third attack there was sleep, and the fourth passed unnoticed; after that, the patient was completely cured. I put the question to Dr. Kuhnen if he had observed any cases in which the Spiræa had failed in its action, and he answered that both himself and all those to whom he recommended the remedy had never met with any case in which Spiræa had not proved beneficial.

In 1846 Dr. Maldzinewitch, who had an appointment at a cotton mill in the district of Vereisk, government of Moscow, communicated six cases of people who had been bitten by rabid wolves, dogs and horses, and who were cured by the root of the Spiræa. I will describe the cases in a few words: In 1842 a peasant, Paul Ivanoff, was bitten by a mad wolf in twelve different places; the wounds were very deep; his hands and head were injured and his left eye completely destroyed. After taking the root of the Spiræa for two months and a half, he was completly cured. The same wolf had bitten two horses and was killed; its madness was ascertained by autopsy, and by the fact that both horses grew rabid. Another peasant, Terenti Sakharoff, was wounded at the same time by the mad wolf; his lower lip and upper eyelid were injured; he refused the treatment of the doctor and turned for advice to a quack-doctor; he died of hydrophobia 29 days after the accident. In May, 1845, three shepherds and 19 head of cattle were bitten by a mad wolf. Eleven head of cattle perished with all the symptoms of madness; the three shepherds and the remaining eight head of cattle were cured by the root of the Spiræa. A peasant, serf of the Prince Scherbatoff, was bitten by a horse, which in its turn had been bitten by a mad wolf; the peasant took the root of the Spiræa and remained in good health: the horse was shut up out of precaution and died with the symptoms of madness. The 1st of September, 1846, a boy of sixteen, Vladimir Ivanoff, was bitten on the left hand by a mad pointer. Six weeks' treatment of the Spiræa root cured him completely. The dog was shut up and died with all the symptoms of madness. On the 12th of October a servant of a Mr. Korobine, a man of about 50 years of age, was bitten by a mad dog and was cured after taking the root for six weeks. Dr. Maldzinevitch made experiments on animals to test the action of the Spiræa; he shut up mad dogs in different compartments; some of them were left without treatment and died; those that took the root were cured. The method of treatment of Dr. Maldzinevitch is as follows: The wounds are bathed with an infusion of the root of Spiræa in vinegar till the bleeding ceases, then covered with compresses wetted with the infu-

sion; the compresses are changed twice a day till the wounds are healed, which generally takes place in the space of about four weeks. The patient must stay in a temperature not less than 13° Reaumur, and his whole body must be rubbed twice a day with the infusion; morning and evening, he takes a tablespoonful of juice, extracted from the root, and at noon a dose (the quantity is not named) of the finely chopped root. After the 13th day, the dose of juice is doubled; two tablespoonfuls are taken at a time twice a day; the treatment continues during six weeks. Notwithstanding the treatment, on the 28th and 29th day after the accident, the patient is sometimes troubled with dreams, during which he struggles with mad animals; it is a sure sign of approaching hydrophobia; to avert the attack a vesicatorium must be immediately applied to the spine of the patient in its full length; after the blisters have been pricked and the skin cut off, the sore places must be bathed from three to five times a day with the juice of the root and the internal doses must be augmented (the quantity not named). After this treatment the troubled dreams and spasmodic contraction of the throat cease, and the whole body is covered with an ebullition similar to the scab, with strong itching. The appetite returns, the stool grows normal, evacuations happen sometimes twice a day, the urine grows darker with a thick sediment, the patient recovers his usual spirits and appears quite well on the 32d day; but one must not be deceived by appearance; the treatment must be continued for 60–62 days, as before that term one can never be sure that hydrophobia will not break out. The treatment of fully developed hydrophobia is as follows: The patient must remain in a temperature not less than 28° Reaumur; his whole body must be rubbed with the Spiræa vinegar three times a day; the Spanish fly (vesicatorium) is applied to the spine and the sore place is dressed with the fresh juice of the root changed several times a day. Five clysters a day are given to the patient with the fresh juice, compresses are tied round the neck; they are also dipped in the juice and constantly kept wet; after that the patient generally grows calmer; internally he takes two spoonfuls of juice every three hours, and uses the juice sweetened with honey to drink if thirsty. An evident amelioration takes place after sixteen hours and recovery in the space of three days. The method of Dr. Maldzinevitch for the treatment of cattle is as follows: Every animal gets, according to its size, ¼ of a pound or more of the chopped root, mixed with its food; it is best to mix it with oats; dogs take it with oatmeal. The treatment lasts two months. In the heat of summer the animals ought to be bathed in the river and their bodies rubbed with the plant Spiræa. If these prescriptions are accurately fulfilled one may be nearly sure, that the animals will escape hydrophobia.

We borrow the following details about Spiræa from the article of Mr. Deriker published in the Journal for Homœopathic Treatment edited in St. Petersburgh.

In Volynia the root is used as a popular remedy against hydrophobia. In the governments of Moscow and Kaluga hydrophobia has been also treated with this root. (Krebel; Popular Medicine and Popular Remedies in Russia; Nelubin; Pharmacology, Friend of Health, 1845–82; Kühner; Russian Medical Gazette, 1850–1851.)

In the mountains of Oural this remedy is used in colds; a kind of beer is prepared out of the root and mixed with black currant leaves. If taken in great quantity this beverage causes diarrhœa and dysentery. (Netchaeff, Friend of Health, 1834, 117.) The flower calls forth perspiration. (Krebel.) The leaves of Spiræa ulmaria and Spiræa filipendula are used in Siberia against worms. (Osiander.) In the ancient pharmacologies the root, leaves and flowers of Spiræa are recommended in hemorrhagia, diarrhœa, white flow and hysterical attacks, also against worms: according to the opinions of Bourgeois and Vicat an infusion of the flower of Spiræa calls forth perspiration better than Sambucus niger (Strumpf Argnesmi Kellehre). In the middle of the seventeenth century this remedy seems to have been much used. Ettmüller recommends it not only as a hydrotic but as an antidote to every disease (alexipharmacon pellens malignitatem). It was principally used in epidemics and malignant diseases such as dysentery and malignant fever. (Ettmüller, Schroederi di lucidata Phytologia.) Galler and Rosenstein recommend an infusion of the flower of Spiræa in smallpox and measles, as it makes the eruption come out easier; if given with flower of sulphur it calls forth the rash if it has receded. (Murray.) Dr. Stermann of Vernigorod in Saxony had been treating for a long time, without any results, a woman of 35, who suffered from amenorrhœa; he accidentally heard from an old woman of a remedy which proved efficacious: it was an infusion of the following herbs: Spiræa ulmariae, Flor liliae, herb Thymi serpylli, herb Veronicae mixed in equal parts; but as the Spiræa was not taken alone it is difficult to ascertain its action in this case, the more so as ancient physicians prescribed the Spiræa in metro- and menorrhaghia, and the herb Thym. serp. was considered an excellent remedy in amenorrhœa, an opinion which exists to this day in some parts of Germany (Dirbach; Modern Discoveries in Materia Medica). The new pharmacologies rarely mention Spiræa. Geiger and Mohr speak of it as a remedy causing constipation and being a stimulant to the healing of wounds; they add that it is no more used.

Remedies not mentioned by Kryloff, but described by Deriker. Allium sativum. Used against hydrophobia. A mad dog had bitten several persons in Madrid; they all died of hydrophobia except a

servant, who owed her cure to an accident. During her fit of rage she was locked up in a garret where garlic had been hung to dry. She screamed and tossed about furiously till late in the night; then she grew quiet, and the next morning asked to be unlocked, as she felt quite well and was hungry and thirsty; the door was opened and the invalid was calm, but very weak. It seems that during her rage she had torn off the garlic and had eaten a great quantity; after that she was very hot, perspired a good deal, and fell asleep. A similar case happened in Alicante with a young girl who was also locked up in a garret, where she ate garlic and was cured. (Northern Post, 1862.)

Anchusa officinalis. Germ., Ochsenzunge Liebäugel. French, Bonglosse. In the government of Iver it is taken against hydrophobia; a powder of half an ounce every morning fasting, during 13 days; an infusion is taken as a drink. The wound is washed with buck and the powder is put over it.

Campanula rotundifolia. Mentioned in the compound of Levashoff. (See Origanum.)

Cuprum. Copper.

The Russian quack doctors often prescribe Cuprum ammonium with Merc. corrosiv. against hydrophobia. In other parts yellow copper is taken with plumb. oxydat. This is taken when hydrophobia is developed to its highest pitch. (Zäitzeff.) In Poland red copper is taken; a teaspoonful of fine shavings of copper and the same quantity of Plumb. oxydat. mixed with honey is taken by the patient when the rage is at its height. The trial has been made by trustworthy people. (Kossak.)

Delphinium consolida. Germ., Ritter sporn. French, Dauphinelle, Pied d'alouette.

Used in the government of Orel against hydrophobia. (Journal for General Medical Science, 1816.)

Ferrum. Iron.

The shepherds in Taurida cure their dogs, when bitten by rabid animals, with oat-meal in which a piece of rusty iron has been boiled. It is not known if it acts upon human beings. (Naval Gazette, 1858.)

In some parts of Russia wooden buckets are used with pieces of iron nailed at the bottom; they are always kept filled with water for the dogs, and it is said that the dogs that take their water out of those buckets never grow mad.

Filago arvensis. Filz kraut, Schimmel kraut, Fadenkraut. Dr. Klarin, a head physician in one of the military hospitals, writes as follows: "I use a remedy, discovered by myself, against the bite of mad animals; it is an herb called Micropus erectus. L. A. XIX ord. syngen. polyg. nessessaria. I give it internally, reduced to a pulp,

and in an infusion. The dose of pulp is ½ or ⅓ of a drachm with honey. The infusion is made of an ounce of the herb in a pound of water; two ounces are taken three times a day. Used during 60 days. Poultices of the herb exteriorly; the wounds bathed with the infusion. A vesicatorium sometimes used to promote the suppuration." In a note of the editor it is said that Prof. Nelubin examined the plant and found it to be Filago arvensis; it is different from the Micropus erectus, although it belongs to the same family. Both plants are very much alike, and are often mixed up by the common people. (Military Medical Journal, 1848, L. I., No. 2.)

It is certain that Dr. Klariu discovered this remedy among the people. He does not mention by what means he found it out.

Gentiana campestris, s. pratensis. Germ., Blauer Dorant.

Considered a good remedy against the bite of rabid animals in the government of Nijny, district of Arzamas. (Pallas.) Was recommended against hydrophobia in the seventeenth century, and in many parts considered a specific. In 1840 Lalié (Med. Jahrb. XXXII.) called attention to this remedy. He gave one-quarter of an ounce of the pounded root, mixed with water to a pulp, during 9 days. (Krebel.)

In the government of Perm, Gentiana pratensis is taken as a preventive against hydrophobia during several weeks, morning and evening, one-half drachm of the dried plant prepared as a powder or an infusion. It calls forth strong perspiration.

Levisticum officinale. Germ., Liebstöckel; French, Liveche Ache de Montagne.

Chewed and applied to wounds caused by the sting of serpents and bites of mad dogs and wolves. (Popular Herbal.)

Lotus ornithopodioides.

In the south of Russia, near the town of Berditcheff a peasant cured the bites of mad animals with an herb which he kept secret. Some seeds found in the pounded herb were sown, and proved to be Lotus ornithopodioides. It was noticed that the old man gathered the herb without touching the root. (Friend of Health, 1841.)

Lycopodium clavatum. In Galicia, near the frontier of Wallachia and Hungaria, this plant is used with success against hydrophobia. (Journal of General Medical Science, 1811.)

Natrum muriaticum. A salted herring torn to pieces is sometimes applied to the wounds caused by rabid animals. (Brisemeister in Fellin.)

Origanum vulgare. Germ., Doste, Wilde Doste, Wilder Majoran, Wohlgemuth. One of the ingredients in the compound of Levaschoff.

Polemonium coerulum. Used against hydrophobia—without nam-

ing the country. (Journal of General Medical Science, 1811, No. 1.)

Polygonatum offic. s. Convallaria polygonatum. Germ., Weiss wurzel, Salomon's Siegel. French, Sceau de Salomon.

The dried herb is given once or twice a day to those that have been bitten by mad animals; it is even given to those who are already in the stage of rage. A pinch, as much as can be held by three fingers, is mixed with ordinary black bread. The plant must be dried, pounded and sifted. The treatment lasts three days. No other drugs are used. I have noticed that healthy dogs ran away and refused to take the stuff, even if hungry. I have never seen hydrophobia rages or any recurrence of the disease either in the men or animals who had taken the plant. (Communication of a parish priest, Pomerantzoff, in the government of Orel, district of Bolkoff to the Agricultural Gazette.)

I have yet to mention the three homœopathic remedies used in the treatment of hydrophobia. (Rückert Klinische Erfahrungen, Bd. IV. pages 622, 623, 624.)

Hyoscyamus. A young girl of 21 was bitten by a mad dog; she sucked the wound herself; it was then burned with gunpowder and the suppuration kept up. Nevertheless the first symptoms of hydrophobia appeared after a few days at the sight of a looking-glass. Constant twinges and cramps, foam at the mouth, impossibility to speak, but without loss of consciousness; after a swoon she could sit; teeth shaky, tongue swollen, throat and neck so swollen that it seems to her she could not make a thread pass, memory failing, light and shining objects call forth sparks and rays; red eyes with heat and pricking pains in the forehead. Hyoscyamus 12, taken in one drop, relieved her immediately, and she was soon cured. Hartmann says that Hyoscyamus is preferable to belladonna in constant convulsions of the extremities, when the cramps of the throat are not strong and there is a wish, not of biting, but of doing some other harm to those who are near. One of the indications in favor of hyoscyamus is inconsiderable thirst with dryness of the mouth, requiring to be moistened; constant attacks with slight intermissions; sleep, out of which the patient awakens with convulsions, as if frightened. Belladonna is preferable when there is a wish to go to sleep, but in vain.

Hydrophobin. Hering considers this remedy as indicated in the beginning of the disease The two cases that are mentioned do not prove anything; there were no symptoms of hydrophobia, and there were no proofs that the dogs were really mad. The same can be said of

Lachesis, as it was never taken alone, but alternatively with other

drugs. According to the opinion of Hering, Lachesis corresponds to hydrophobia in its highest stage of development.

Spiræa Ulmaria. Ruckert mentions a case related by Kurtz, who took it from "The Medical Gazette of Russia." It is evidently the case spoken of by Kuhnen.

I must yet call attention to the following communication published in the *Allgemeine Homöopatische Zeitung*, vol. 88 (1874), page 174. The Drs. Ivanfy and Kecskemet in Hungaria have published a pamphlet under the title of "Cure of Hydrophobia in Men;" a number of official and private certificates of the healing of hydrophobia are imparted. The treatment is as follows: I. Tinctura Cantharidum mater; II. Cuprum aceticum, 3d tritur. or 1st dilution; III. Belladonna, 3d dilution. In fresh wounds I used compresses of cold water until the medicines were brought, after that the wounds were bathed every three hours with Tincture of Cantharides, and thus submitted to the exterior action of a specific. A drop of the third dilution of the same tincture was immediately taken internally. During the following 9 days the three above-named remedies were taken, No. 1 in the morning, No. 2 at noon and No. 3 in the evening; if a crisis took place and there appeared any general symptoms such as fever, heat, etc., the corresponding specific remedies were prescribed, such as Aconitum.

The two following observations must also be noted:

1. Dr. Ivanfy adds to his article on hydrophobia the following case: I had the opportunity of treating once in Koprairitz (Hungaria) a girl who had been stung by a serpent, coluber berus. The sting was at the back of the right leg; there was a bloody stripe and a strong swelling all around. A paste of clay and water was applied to the wound and changed every quarter of an hour, then Tinctura Cantharides mater was applied once exteriorly; internally the patient took Belladonna 3 and Lachesis 10, till the symptoms disappeared.

2. In a very popular Moscow paper, the *Russkija Viadomosci*, the following article has been inserted. I cannot name the year or date:

A remedy against the madness of dogs.—One of the members of the Medical Society in Vilna, Mr. Fitzky, being present at one of the last conferences of the Society, reported the following observation made by him the year before in the country; a very ferocious dog in his yard was often noticed tearing to pieces the serpents that are abundant in those parts, the coluber berus and vipera berus; its head, neck and mouth were often stung by the serpents and very much swollen; the same dog was bitten by an indubitably mad dog (the cattle and another dog bitten by the animal grew mad); the dog was severely injured by the mad dog and shut up to be shot at the first

alarming symptoms, but it remained in perfect health. This circumstance attracted the attention of the reporter; in making inquiries, he met with a woman who had been stung by a serpent, and then bitten by a mad dog, but remained in good health; the fact raised the question in his mind whether there exists an antagonism between the poison of the serpent and the poison of the mad dog, similar to the antagonism existing between variola and vaccina. Experiments might be very easily made by physicians and veterinary doctors in the country, and if it were proved that the poison of the serpent is a preservative against the bite of mad animals, it is very possible that hydrophobia might be treated by an inoculation of the poison of the serpent. The fever ensuing from the inoculation of the poison of the serpent might counteract the action of the poison of the mad animal. Young dogs might be preserved from madness by this inoculation, and a great many misfortunes averted. On leaving the country the reporter ordered some serpents to be kept in sand in glass pots, and, if the case occurred that an animal should be bitten by a mad dog, he enjoined the experiment to be tried of having the bitten animal immediately stung by a serpent.

In any case the connection of hydrophobia and the poison of the coluber with Cantharides is very striking and worthy of consideration.

The fact cannot be denied that the fund of popular remedies is considerable, and many of them, if not all, are worthy of particular attention as their action has been observed in fully developed hydrophobia, which is not the case with the inoculations of Pasteur. If all the above-named remedies have acquired renown in different parts and in such parts that often have no communication with each other, one has the right to suppose that their renown has been founded on real experience, that is to say, on an experience of many years. If we even admit of the circumstance that many of those who have taken the remedies may not have been bitten by really rabid animals, the admission can only be made concerning the prophylactic treatment, and can have no connection with those who were attacked by hydrophobia. Nobody will dispute the fact that it is a great thing to have remedies in hand which are efficacious not only in prophylactic treatment, but in the treatment of the developed disease. It is very important to have at one's disposal a large fund of remedies connected with one species or form of disease, as it gives the choice of a remedy adapted to every individual case, for every drug proved according to the laws of homœopathy presents its own peculiar picture; with the law of similia as a guide, every remedy can be applied to the case to which it corresponds the most, that is to say, when the picture of the illness is nearest to the artificial illness pro-

duced by the drug. If the causes which engender the infection of hydrophobia are the same, their action is not similar, as we know very well that the same cause produces two distinct forms of disease: rage and quiet madness. Those two forms are applicable to the whole mass of patients, but if you take to examining every individual case you will find distinctions similar to those offered by the pathogenesis of your remedies. To cure all those who suffer from hydrophobia with *one* remedy is impossible and inadmissible—it is contrary to the laws of nature, and utopian.

We have only one more wish to express, that of finding the necessary good-will and readiness to work with united forces—vivibus unitus—on the field of experiments with the hope that they may turn to the welfare of humanity and be a new proof that there is no disease in the world in which the new school cannot prove its superiority over the reigning medical school.

The Committee on Foreign Correspondence was reappointed for the year 1889.

The Report of the Committee on the International Homœopathic Congress of 1891

Was then presented by the Chairman, Dr. I. T. Talbot, of Boston, Mass., and was accepted and referred to the Committee of Publication. It is as follows:

The Committee appointed by the Institute to make arrangements for an International Homœopathic Congress have held two sessions and carefully considered and discussed the work for which they were appointed.

To hold an International Congress, which shall favorably represent our school as it exists in all the civilized portions of the world, is an undertaking of no little magnitude, and in order to be successful, should have the active working interest of all our friends.

The time, the place and the scope of this Congress are matters of vital importance, and the Committee have already entered upon a correspondence with the officers of the last Congress and with those most likely to be interested in this, and desire the widest information before fully deciding these important matters.

The last Congress, held in Switzerland in 1886, voted that the next Congress should be held in this country in 1891. The Committee would not for any trivial reason change the year thus designated or break the quinquennial succession of these Congresses, yet the fact

that the succeeding year, 1892, will be the 400th anniversary of the discovery of America, and that there is a proposition to make an international celebration of this event, may make it wise to postpone our Congress to that year.

The Committee consider that the place of meeting should be at some easily accessible point, where the most ample accommodations can be secured.

The scope of this Congress and the subjects to be presented and discussed was, naturally, one of the first things to engage the attention of this Committee, and they deem it proper that, while homœopathy should be the pivotal subject of this Congress, yet all branches of medical science, directly influenced by homœopathy, may legitimately and with advantage be presented and considered.

The Committee have added to their number ex-president F. H. Orme, M.D., whose deep interest in this subject was exhibited in the last session of this Institute.

The Committee solicit the active co-operation of each and every member of the Institute, since upon them must largely depend the success of this undertaking.

Respectfully submitted,

I. T. TALBOT, M.D., Boston,
J. W. DOWLING, M.D., New York,
R. LUDLAM, M.D., Chicago,
J. P. DAKE, M.D., Nashville,
B. W. JAMES, M.D., Philadelphia,
O. S. RUNNELS, M.D., Indianapolis,
T. G. COMSTOCK, M.D., St. Louis,
F. H. ORME, M.D., Atlanta,
Committee.

NIAGARA FALLS, N. Y., June 27th, 1888.

The Institute voted that the sum of twenty-five dollars be appropriated for the use of the Committee during the ensuing year.

The Committee to audit the Treasurer's accounts presented their report, which was accepted and referred as usual. (See "Report of the Treasurer.")

THE REPORT OF THE COMMITTEE ON AN INTERNATIONAL PHARMACOPŒIA

Was read by Lewis Sherman, M.D., of Milwaukee, Wis., Chairman of the Committee, and was accepted and referred for publication. The report is here appended.

Your Committee which was appointed to confer with the American member of the Pharmacopœial Commission of the World's Homœopathic Convention, with reference to the preparation of an international pharmacopœia, begs leave to report, that, owing to the prolonged absence in Europe of Dr. Walter Y. Cowl, it has not yet been possible to secure the desired conference with that commission.

We would report further, that, in pursuance of the instruction given in the resolution authorizing our appointment, we have examined the British Homœopathic Pharmacopœia with reference to its adaptation to the wants of physicians in the United States and other countries outside of Great Britain, that we find this to be a book of great merit, that we specially commend the care taken in the tincture-making processes, the recognition of the effect of natural plant-moisture in lowering the alcoholic strength of the fresh-plant tinctures, the prescription of alcohol of different strengths for the preparation of different drug tinctures, and the general accuracy of the detailed descriptions of drugs. We are instructed to suggest such changes as will improve the work and adapt it to use in this and other countries outside of Great Britain. Among the changes which we would suggest are the following:

1. The substitution of the name *dilution* in place of "tincture" for attenuated liquid preparations.

2. The use of distilled water as a standard of comparison between weights and measures. This would bring our system in harmony with the French decimal system and greatly simplify the descriptions of processes, and would add ten per centum to the strength of the tinctures. Instead of "minim" we would read *grain-measure*, just as in the descriptions of volumetric analysis.

3. The use of glass-stoppered bottles for distilled water.

4. The introduction of alcohol of the specific gravity .820, which is now a standard grade in the United States, being the highest obtained by distillation without the use of chemicals.

5. The authorization of the decimal scale of notation which is now in such general use.

6. The omission of references to the therapeutic activity of certain preparations. We think such references out of place in a work of this character.

7. The introduction of maceration as a tincture-making process alternative with percolation.

8. Making the dilution to correspond in medicinal strength (drug-power) with triturations of the same numbers instead of making them $\frac{1}{100}$ as strong.

9. The limitation of the sign θ to denote strongest liquid pharmacopœial preparation.

10. The use of the sign 0 (zero) to denote original substance.

11. The authorization of a single vernacular pharmacopœial name for each medicine.

12. The alphabetical arrangement of all the caption-names of medicines in a single series. This is merely to facilitate reference.

13. A simplification of the process of trituration and the requirement of a longer time to a given quantity of the finished product.

On motion of I. T. Talbot, M.D., the following was adopted:

Resolved, That a committee be appointed consisting of twelve members, six of whom shall be pharmacists, to prepare a pharmacopœia which shall bear the authoritative sanction of this body.

That this committee be instructed to confer with the Pharmacopœial Commission of the International Homœopathic Congress held at Basle, Switzerland, in 1886, and with committees which may be appointed for the same purpose by foreign societies; with the intent of making the work, if possible, international in character.

That this committee be instructed to use as a basis the British Homœopathic Pharmacopœia, due weight being giving to other authorized pharmacopœias, and to obtain the fundamental facts, as far as possible from original sources.

That this committee shall be empowered to fill any vacancies in its membership caused by death or resignation.

The following were appointed to serve on the above committee: Drs. Lewis Sherman, J. Wilkinson Clapp, F. E. Boericke, Henry M. Smith, Jas. E. Gross, Wm. Boericke, J. P. Dake, C. Wesselhoeft, A. C. Cowperthwaite, T. F. Allen, Malcolm Leal, H. R. Arndt.

The Committee on the President's Address requested that their report might be deferred until Thursday morning just prior to the report of the Committee on Medical Education. The request was, on motion, granted.

The Report of the Committee on Medical Literature

Was presented by John C. Burgher, M.D., of Pittsburgh, Pa., Chairman of the Committee. It was accepted and referred to the Committee of Publication, as follows:

Report of the Committee on Medical Literature, J. C. Burgher, M.D., Chairman, Pittsburgh, Pa.

Mr. President and Members of the Institute:

The value of the medical publications issued since the last meeting of the Institute, would be difficult, if not impossible, to estimate. A critical review of the numerous books and journals of our own school for the past year would, in itself, be a herculean task. The medical books published during the year in the interest of homœopathy, have received due attention at the hands of our journalistic literati, and need only be named by title in this report. Medical publications, whether in the form of books, monographs or periodicals, are not equally appreciated by those who read them. Each publication, however, adds something to the records of medical science and marks its progress. Every addition to our therapeutic resources widens the field of future triumphs.

The following named publications comprise the homœopathic literature issued during the year ending June 1st, 1888, in this country, including foreign journals.

BOOKS ISSUED DURING THE YEAR ENDING JUNE 30TH, 1888.

PRACTICAL URINALYSIS WITH CLINICAL HINTS. By Prof. J. B. S. King, of Chicago: Boericke & Tafel, Agents.

THE PHYSICIAN'S MANUAL OF SIMPLE CHEMICAL TESTS. Part II. Constituents of Urine. By Clifford Mitchell, A.B., M.D. Chicago: Gale & Blocki. pp. 30.

TRANSACTIONS OF FORTIETH SESSION OF THE AMERICAN INSTITUTE OF HOMŒOPATHY. Held at Saratoga Springs, N. Y. pp. 938. Octavo.

TRANSACTIONS OF THE HOMŒOPATHIC MEDICAL SOCIETY OF THE STATE OF PENNSYLVANIA. 1887. Octavo. pp. 370.

PROCEEDINGS OF THE TWENTY-THIRD ANNUAL SESSION OF THE HOMŒOPATHIC MEDICAL SOCIETY OF THE STATE OF OHIO. 1887. pp. 308.

A TREATISE ON BRIGHT'S DISEASE OF THE KIDNEYS. Its pathology, diagnosis and treatment, with chapters on Anatomy of the Kidneys, Albuminuria, and the Urinary Secretion. By Henry B. Millard, M.D., A.M. Second edition. Revised and Enlarged. New York: W. Wood & Co. 1886. Cloth. 8vo. pp. 264.

OXYGEN IN THERAPEUTICS. A treatise explaining the apparatus, the material and the processes used in the preparation of oxygen and other gases with which it may be combined; also its administration and effects. By C. E. Ehinger, M D. Chicago: Chatterton & Co. 1887. Cloth. pp. 157.

TAKING COLD. Its nature, causes, prevention and cure. By John W. Hayward, M.D., M.R.C.S., L.L.A., etc. Seventh edition. Revised and Enlarged. London: E. Gould & Son. 1887. Cloth. 16mo. pp. 186.

ORIFICIAL SURGERY AND ITS APPLICATION TO THE TREATMENT OF CHRONIC DISEASES. By E. H. Pratt, A M., M.D., LL.D., Professor of principles and practice of surgery in Chicago Homœopathic Medical College. Chicago: W. T. Keener. 1887. Cloth. 12mo. pp. 129.

THE ELEMENTS OF MODERN DOMESTIC PRACTICE. A plain and practical handbook, describing simple disease, etc. By Henry G. Hanchett, M.D. Cloth. 12mo. pp. 377.

SEXUAL HEALTH. A companion to a plain and practical guide for the people in all matters concerning the organs of reproduction in both sexes and all ages. By A. H. Laidlaw, A.M., M D. New York: C. T. Hurlbut, Publisher. Cloth. 12mo. pp. 81.

RIMEDII INDIVIDUALIZZATI per Sintomi e Malattie ovvero Grande Repertorio Clinico Omiopatico. (Clinical Repertory; or Remedies Individualized by Symptoms and Diseases). By Tommaso Cigliano, M.D. Paper. 8vo. pp. 964. 1887.

CLINICAL MATERIA MEDICA. By E. A. Farrington, M.D. Philadelphia, Pa.: Sherman & Co. 1887. pp. 752. 8vo.

THE PHYSICIAN'S VISITING LIST FOR 1888. Philadelphia, Pa.: P. Blakiston, Son & Co.

HOW TO STUDY MATERIA MEDICA. By C. Wesselhoeft, M.D. Otis Clapp & Son. 1887. Cloth. 8vo. pp. 27.

THE MEDICAL GENUS. A Guide to the Cure. By Stacy Jones, M.D. Philadelphia: J. C. Winston & Co. 1887. Small 8vo. Cloth. pp. 320.

WINTERING ABROAD. By Alfred Drysdale, M.D. London: J. S. Virtue & Co. 1887. New York and Philadelphia: Boericke & Tafel. Cloth. Small 4to. pp. 62.

SALIENT MATERIA MEDICA AND THERAPEUTICS. By C. L. Cleveland, A.M., M.D. Philadelphia: F. E. Boericke. 1888. Cloth. Small 8vo. pp 171.

SPECIFIC MEDICATION AND SPECIFIC MEDICINES. By John M. Scudder, M.D. Cincinnati: 1888. Small 8vo. Cloth. pp. 432.

THE HOMŒOPATHIC THERAPEUTICS OF RHEUMATISM AND KINDRED DISEASES. By D. C. Perkins, M.D. Philadelphia: F. E. Boericke. 1888. pp. 180.

THE PRACTITIONER'S GUIDE TO URINARY ANALYSIS. By Clifford Mitchell, A.B., M.D. Chicago: Gross & Delbridge. 1888. pp. 188.

SIMILIA SIMILIBUS CURANTUR. By C. S. Mack, M.D. Boston: Otis Clapp & Son. 1888. pp. 31.

THE TWELVE TISSUE REMEDIES OF SCHUSSLER. By William Boericke, M.D, and Willis A. Dewey, M.D., of California. Philadelphia: F. E. Boericke. 1888. pp. 303. 8vo.

PATHOGENETIC AND CLINICAL REPERTORY OF THE MOST PROMINENT SYMPTOMS OF THE HEAD. By C. Neidhard, M.D. Philadelphia: 1888. pp. 188.

AMERICAN MEDICINAL PLANTS 2 vols. 180 plates, Colored. Boericke & Tafel. New York and Philadelphia: 1888.

FIFTY REASONS FOR BEING A HOMŒOPATH. By J. Compton Burnett, M.D. London: The Homœopathic Publishing Co. 1888.

A REPERTORY OF GONORRHŒA. By Samuel A. Kimball, M.D. Boston: Otis Clapp & Son. 1888. pp. 53.

LECTURES ON DISEASES OF THE HEART. By Alonzo Clark, M.D., LL.D. New York: E. B. Treat & Co. 1887.

PRINCIPIO OBBETTO E LEGGE DELLA MATERIA MEDICA OMIOPATICA. The principle, aims and laws of the Homœopathic Materia Medica. Octavo. pp. 80. Naples. 1888. By Dr. Tommaso Cigliano.

L'OMIOPATIA IN ITIALIA. Organo dell Instituto Omiopatico Italiano. Dr. Tommaso Cigliano. Faseicolo 8. Turin. 1888. G. Derossi. 8vo. pp. 64.

UNITED STATES OF COLOMBIA. S. A. TRATAMIENTO BIOQUIMICO DE LAS ENFERMEDADES. Por Dr. Schussler. Translated from the English into Spanish by J. F. Convers. Bogota: U. S. C. Fernando Ponton. 12mo. pp. 160.

HOMŒOPATHIC PERIODICAL LITERATURE.

Reported by Henry M. Smith, M.D., New York.

AMERICAN.

The American Homœopathist. New York. Edited by Frank Kraft, Sylvania, Ohio. Published monthly, in quarto, by A. L. Chatterton & Co., 78 Maiden Lane, New York. Vol. 14 began with the issue for January, 1888.

The American Observer. Detroit, Mich. Discontinued.

The Clinical Review, Cleveland, Ohio, has been discontinued, the last number bearing date August, 1887.

The California Homœopath. San Francisco. Edited by Wm. Boericke, M.D., and W. A. Dewey, M.D., No. 834 Sutter Street, San Francisco, Cal. Published monthly by Boericke & Schreck, No. 234 Sutter Street, San Francisco, Cal. Octavo. 384 pages. Subscription, $2.00. The current volume, 6, began with the January number.

The Chironian. New York. Edited and published semi-monthly, during the college session, by students of New York Homœopathic Medical College. Subscription, $1.50.

The Clinical Reporter, edited by the Faculty of the Homœopathic Medical College of Missouri, made its first appearance in January. Published by Foulon & Co., in octavo form of 24 pages, on the 15th of every month. Subscription, $1.00.

The Clinique. Chicago, Ill. Edited by R. Ludlam, M.D., No. 1823 Michigan Avenue. Published by E. S. Bailey, No. 3034 Michigan Avenue. A monthly abstract of the clinics and of the proceedings of the Clinical Society of the Hahnemannian Hospital of Chicago. With the January number began the ninth volume and year of publication.

The Hahnemannian Monthly. Philadelphia, Pa. Edited and published by Clarence Bartlett, M.D., and Wm. B. Van Lennep, M.D. With its January number it began its twenty-third volume, with Pemberton Dudley, M.D., editor and publisher. With the May issue Drs. Bartlett and Van Lennep assumed the editorship and publication. Subscription, $3.00.

The Homœopathic Expositor. Ithaca, N. Y. Discontinued.

The Homœopathic Journal of Obstetrics, Gynæcology, and Pædology. New York. Edited by Philip Porter, M.D., Detroit, Mich. Published by A. L. Chatterton & Co., 78 Maiden Lane, New York. Bi-monthly. Quarto. Subscription, $4.00. The current volume, 10, began with the January number.

Homœopathic News. St. Louis, Mo. Discontinued.

The Homœopathic Physician. Philadelphia, Pa. Edited and published by Edmund J. Lee, M.D., and Walter M. James, M D., No. 1123 Spruce Street, Philadelphia. Monthly. Octavo. Subscription, $2.50. The current volume, 8, began with the January number.

The Homœopathic Recorder. Philadelphia. Edited by J. T. O'Connor, M.D., No. 19 W. Forty-sixth Street, New York. Published by Boericke & Tafel, No. 1011 Arch Street, Philadelphia. A bi-monthly octavo, of 48 pages, is now in the third year of its publication. The volume began in January. Subscription, $1.00.

The Medical Advance. Edited by H. C. Allen, M.D., Ann Arbor, Mich. Published at No. 56 Wabash Avenue, Chicago, at $3.00 a year. The current number, June, 1888, completes volume 20, which began with the January number. With this volume the number of pages was increased. The repertory of the Head Symptoms by E. R. Snader, M.D., begun with the volume, is continued.

Medical Call. Quincy, Ill. Edited and published by O. H. Crandall, M.D. Bimonthly. Subscription, 50 cents.

The Medical Counselor. Ann Arbor, Mich. Edited by D. A. McLachlan, M.D., and published by Medical Counselor Publishing Co., Ann Arbor, Mich. Volume 13 began with the February number. Monthly. Subscription, $2.00.

The Medical Current. Chicago, Ill. The last number of the periodical was published in September, 1887. It is now consolidated with the Medical Advance.

The Medical Era. Chicago, Ill. Edited by Chas. Gatchell, M.D., and James E. Gross, M.D. Published by Gross & Delbridge, No. 48 Madison Street. Monthly. Quarto. Subscription, $2.00. The current volume, 6, began with the January number.

The Medical Institute. Philadelphia, Pa. Edited by T. L. Macdonald. Published monthly during the college year by the Institute of the Hahnemann Medical College, at No. 1231 Filbert Street, Philadelphia. In large octavo of 16 pages. Subscription, $1.00. The third volume, and year, began with the January number.

The Medical Visitor. Chicago, Ill. Edited and published by T. S. Hoyne, M.D., No. 1833 Indiana Avenue. Issued monthly. An octavo of 32 pages, about one-half of which are devoted to a Directory of Western States, the successor of Hoyne's Directory. It is now in its fourth year and volume of publication, which began in January. Subscription, $1.00.

The Minnesota Medical Monthly. Minneapolis, Minn. Edited by William E. Leonard, M.D., P. M. Hall, M.D., R. D. Matchan, M.D., and S. M. Spaulding, M.D. Published by Homœopathic Publishing Co., Syndicate Block, Minneapolis, Minn. The current volume, 3, began with the January number.

The New England Medical Gazette. Boston, Mass. Edited by J. P. Sutherland, M.D. Published monthly by Otis Clapp & Son, No. 10 Park Square. An octavo, at $2.00 per year. The publication began in 1865. Volume 22 began with the January number.

The New York Medical Times. Egbert Guernsey, M D., and A. K. Hills, M.D., Editors, No. 526 Fifth Avenue, New York, N. Y. Quarto. pp. 384. Price, $3.00. Monthly. Devoted to Medicine, Surgery, and Collateral Sciences.

The North American Journal of Homœopathy. New York. Edited by George M. Dillow, M.D., and others, and published by The Journal Publishing Co., No. 152 W. Thirty-fourth Street. It entered on its thirty-sixth year, and third volume of the third series, with the January number. It is issued monthly, and last year furnished 890 pages. Subscription, $3.00.

People's Health Journal. Chicago, Ill. Edited by S. D. Rogers, M.D., and S. Ida Wright, M.D. Published by People's Health Journal Company. Monthly. Subscription, $1.00.

Physicians' and Surgeons' Investigator. Buffalo, N. Y. Edited by Louis A. Bull, M.D., No. 160 Franklin Street, and published by Geo. T. Moseley, M.D., No. 188 Franklin Street, Buffalo. Current volume, 9, began with the January number. Subscription, $1.00.

The United States Medical Investigator. Chicago, Ill. The November number, 1887, is the last received.

Southern Journal of Health. Asheville, N. C. Discontinued.

The Southern Journal of Homœopathy. New Orleans, La. Edited by C. E. Fisher, M.D., Austin, Texas. Published monthly; large octavo of 32 pages, at $2.00 per year, by T. Engelbach, No. 154 Canal Street, New Orleans, La. The January issue was number 1 of the new series, and 53 of the old.

ENGLISH.

The Homœopathic World. London, England. Edited by John H. Clarke, M.D. Published by the Homœopathic Publishing Co., No. 12 Warwick Lane. Monthly. Subscription, $2.00. The current volume, the 23d, began in January.

The Monthly Homœopathic Review. London. Edited by A. C. Pope, M.D., and Dyce Brown, M.D. Published by E. Gould & Son, No. 59 Moorgate Street. Monthly. Subscription, $3.00. Volume 32 began with the January number.

The Indian Homœopathic Review. Calcutta, India. This publication first appeared January 1st, 1882, as a monthly journal under the editorship of Dr. B. L. Bhaduri. It was printed one-half in English, the other in Bengali vernacular. It was afterwards under the joint editorship of Drs. P. C. Majumdar and B. N. Banerji. It will resume publication in January next, 1889.

The Calcutta Journal of Medicine. Calcutta, India. Edited by Dr. M. L. Sircar, Calcutta, India. Published monthly.

New Zealand Medical Gazette.

FRENCH.

L'Art Médicale. Paris, France. Edited by Dr. Jousset, No. 241 Boulevard Saint Germain. Published monthly by Dr. Piedvache, 4 Rue Bastiat. Now in the thirty-fourth year of publication, volume 66 beginning with the January number.

Bibliotheque Homœopathique. Paris, France. Edited by Dr. Vincent-Leon Simon, No. 5 Rue de la Tour des Dames. Published monthly by La Société Hahnemannienne Federative, No. 171 Rue du Faubourg Poissonniere. The 18th volume ended with the December number, 1887. Monthly. 288 pages.

Bulletin de la Société Médicale Homœopathique de France. Edited by Dr. Claude, Paris, France. Monthly.

L'Hahnemannisme. Paris, France.

La Homœopathie Militanté, Brussels, Belgium, is no longer publishèd.

Revue Homœopathique Belge. Brussels, Belgium. Edited by Dr. Martiny. Published monthly. Octavo of 32 pages. Is now in its fourteenth year.

GERMAN.

Allegemeine Homœopathische Zeitung. Leipzig, Germany. Edited by Dr. A. Lorbacher, Leipzig, Germany. Published weekly. This is the oldest periodical of our school. The first number was published in July, 1833, and it has since appeared regularly every week; two volumes a year. The current volume, 116, began with the January number.

Leipziger Populare Zeitschrift fur Homœopathie first appeared in April, 1870, under the editorship of Dr. Willmar Schwabe. It is the organ of the "Central Body of the German Homœopathic Society." It is now in its nineteenth year, and is published monthly. A quarto of 16 pages, with frequent illustrations.

Vereins Nachrichten Blatt is published as a supplement to the Popular Leipzig Journal of Homœopathy, and contains the communications of the Society. Every number is illustrated. It is edited and published by Dr. Willmar Schwabe, Leipzig. Quarto. pp. 4.

Die Internationale Homœopathische Presse, published in Leipzig by Dr. Willmar Schwabe, has been discontinued.

Zeitschrift fur Homœopathische Thierheilkunde. Edited by Dr. Fischer, and published by Dr. Willmar Schwabe, Leipzig, is now in its third year and volume. A quarto of 4 pages. Issued monthly.

Homœopathische Monatsblatter. Stuttgart, Saxony. The successor of the "Mittheilungen an die Mitglieder der Hahnemannia." It is edited by Dr. August Zoppritz. It is in its thirteenth year and volume. Published monthly. A small octavo of 16 pages. It has a circulation of 4800 copies. The volume begins in January.

Zeitschrift des Berliner Vereines Homœopathischer Aertze. Berlin, Germany. Edited by Drs. Windelband and Sulzer. Published by Otto Janke. Bi-monthly. Large octavo. The first volume was published in 1881. The first number of the current volume, 7, was issued in October, 1887.

ITALIAN.

Il Dinamico. Naples, Italy. Was first published in 1870, in Naples, by Dr. Tomasso Cigliano. It was issued monthly in quarto form of 16 pages. It was discontinued after twenty-one numbers, until 1880, when it was again published as an octavo of 32 pages. Only six numbers were issued.

Revista Omiopatica. Rome, Italy. Was first issued in July, 1855. For the first two years it was published monthly, then for twelve years it was issued semi-monthly. In July, 1869, it was changed to a monthly publication, and so continues. In July of the present year it enters on its thirty-fourth year. It is edited by Dr. G. Pompili. It is an octavo of 32 pages. No general index has been published, but one has been compiled with each volume. There is no other homœopathic journal published in Italy.

SPANISH.

El Consultor Homeopatica. Barcelona, Spain. Published monthly in Barcelona, Spain.

El Criterio Medico. Madrid, Spain. Edited by Dr. Z. Perez y Garcia. The organ of the Sociedad Hahnemanniana Matritense and Hospital Instituto Homeopatica. The first number was issued January 1st, 1860, and published semi-monthly until 1886. It is now published monthly in octavo form of 32 pages.

La Revista General de Homeopatia. Bilbao, Spain. Edited by Dr. Antonio Mateos. Published monthly by the Medical Society. Octavo of 32 pages. The first number was issued January, 1886.

La Revista Hahnemanniana. Madrid, Spain. Edited by Dr. Rodriguez Pinilla. Has been merged into El Criterio Medico.

Revista Homeopatica Catalana. Barcelona, Spain. Edited by Dr. Grau Ala. Published monthly.

El Medico de las Familias. Mexico. Edited by Dr. I. E. Monteforte. Published weekly.

La Medicina Moderna. Bogota. Edited by Dr. R. Guerrero. Monthly. Quarto, 8 pages. The first number was issued in January, 1884.

La Reforma Medica. Mexico. Edited by Dr. C. Colin. Published by Circulo Homœopatico Mexicana. Monthly.

URUGUAYAN.

Revista Homeopatica. Montevideo, Uruguay. Edited by Hahnemannian Society. Published monthly.

J. C. Burgher, M.D., was reappointed chairman of the Committee on Medical Literature for the ensuing year.

The Address on Ophthalmology, Otology, and Laryngology

Was presented by Bushrod W. James, M.D., of Philadelphia, Pa., in the absence of Joseph E. Jones, M.D., of West Chester, Pa., Chairman of the Bureau. Dr. James, in representing the Bureau, said:

I have had no time since yesterday, when the papers were placed in my care, to read them and make a synopsis or a formal address for the Institute; but that the Bureau may not go unrepresented, I think it well to make a few remarks on one or two interesting subjects. One of these is the recent efforts at *Corneal Transplantation*, to which Von Hippel, of Giessen, called attention in 1886 and 1887 before the Ophthalmological Society, in Heidelberg, in a paper entitled, "A New Method of Corneal Transplantation." He and Wagenmann, of Göttingen, have both successfully performed corneal trans-

plantation, while in the United States the operation has been undertaken in two cases, but transparency I believe has not been secured. The operation is performed as follows: The new graft for the leucomatous human cornea, in a majority of cases adheres and unites, but to secure transparency permanently in the graft has been the great desideratum, and more recent experiments are overcoming this difficulty by *not cutting entirely through* the human cornea, but maintaining the integrity of Descemet's membrane and its lining epithelium and thus excluding the aqueous humor from the wound and the new graft; for it was found that opacity occurred whenever the cut went entirely through so that the aqueous humor reached the wound. In this latter method of operation the cornea of the dog was used at first, but the cornea of a smaller animal was found much better—that of the rabbit (a young animal) being preferable. At first quite a small trephine was used to cut both the human and grafted cornea, on the supposition that the smaller the area of the circular cut the more readily it heals, but later experience shows that it is better to use a larger trephine, thus making a graft of wider diameter, and thus the probability of a larger transparent central surface being maintained, as the cicatricial margins always become more or less opaque. This operation is very delicate, and especially so is the dissection of the opaque layers of the human cornea from Descemet's membrane. The other precautions in operating are numerous.

I would also mention a peculiar form of *conjunctivitis of an epidemic character*, associated with constitutional symptoms, which I have observed during the past few weeks in Philadelphia. This inflammation differs from the ordinary "spring conjunctivitis" met with more or less by almost all oculists in the temperate zone in the early spring season, that being a local disease in the eyes, characterized by congestion of the conjunctiva, then inflammation, lachrymation, and usually some coryza, but, as a rule, with no general systemic disturbance beyond the orbital region. The disease I refer to comes on suddenly, the conjunctiva becoming quickly and thoroughly congested; usually, the palpebral portion becomes involved first, after which the ocular portion is affected, and an acute catarrhal conjunctivitis ensues. There is a swelling of the orbital and adjacent cellular tissue, and a puffiness under the eyes such as is observed in Bright's disease, but in no case that came under my care, in which a specimen of urine could be procured, could any trace of albumen be discovered, either by heat or chemical action, and on microscopical examination the typical characteristic renal casts of Bright's disease were likewise absent. In some cases there was an accompanying pharyngitis, which developed suddenly. Generally, there is to the patient a full feeling in the globe, and sometimes an

increase in the ocular tension to the touch, and in some cases quite a glaucomatous tendency was exhibited, showing a diminished field and dimness of vision. In my cases these symptoms, however, yielded to the action of remedies without operation. Aconite was most useful; Gelsemium, Apis mel., and Arsenicum proved valuable remedies; but Belladonna aggravated the eye-symptoms of every case in which it was used, as it always does in cases with a glaucomatous tendency.

The Address in Gynæcology

Was presented by Philip Porter, M.D., of Detroit, Mich., Chairman of the Bureau, as follows:

Mr. President and Members of the Institute:

Incumbent upon me, as Chairman of the Bureau of Gynæcology, it is my duty to present to you the most striking events of progress made in the department of gynæcology during the past year.

It is with pride that we, as a distinctive school of medicine, can point to the brilliant results now obtained in the therapeutical field of this special practice, and that no longer can these measures be eclipsed by surgical means which have during the last ten years so captivated the profession.

It is the province of this department in medicine to take the initiative, and give the tone and coloring to the progressive advance of science in gynæcology in this country, so far as it relates to our school; to stamp with its approval all real merit, and to condemn, and if possible to extinguish, all sham. Within the protective fold of this society the Bureau of Gynæcology should make its superior influence felt in all work in this branch of medicine. While we have no new discovery in science, or new improvements in our art, to announce this year that is specially significant, yet the year has brought its changes, however slight its influence, which will be recognized in its proper time. The relation of this Bureau to the Society is not one of assumption, but rather that of a more humble position of a subservient agent, suggesting the kind or character of the work which this Society may direct, and the one subject which we concede now is the most required is that of uterine and ovarian therapeutics. The present study of uterine disorders is part of a programme instituted at St. Louis, in 1885, at which time disorders of the ovaries were considered, to be followed later by the subject of uterine therapeutics. We would now suggest that the Bureau continue the study of the genito-urinary tract by presenting at our next meeting diseases of the female urethra and bladder.

The most striking feature of gynæcology during the last year is

that of conservatism in laparotomy, or more correctly speaking, the universal disposition, during the last few years, to "spay" every woman who presented any of the characteristic symptoms of ovarian or tubal diseases. This reaction, we might say, is a normal sequence to a blind theory, which, as it becomes popular, soon meets the inevitable antagonism so characteristic of the medical profession. At this juncture conservatism reaches out its strong hand, the front rank is halted, and a truce is declared until the proper position of the innovation has been decided upon. So it has been with abdominal surgery in gynæcology; the conservative element, basing their claims upon statistics and practical experience, now cry out against the age of oöphorectomy (which will ever make it an historical period in this special field of medicine). Laparotomy, the now accepted term, has most assuredly been a triumph of genius in the direction of surgical treatment of diseases peculiar to women; "the *éclat* of this operation brings fame and pecuniary recompense out of all proportion to the return which patient labor, great talent and important contributions of new truths in pathology and therapeutics ever receive. It is not, therefore, surprising that mechanical (surgical) gynæcology, so attractive and remunerative, has chiefly engrossed the minds of those who have most exclusively devoted their time and talents to the cultivation of this branch of our practice, while medical gynæcology has, in comparison, been relegated to a subordinate position, and, as a result, can boast of but little growth.

I would not depreciate the importance of surgical gynæcology; for in no department of medicine has more been achieved or have more practical results been obtained than in the relief of suffering and preservation of life. Probably no surgical operation has ever been devised which has added so much to the duration of life, within the period of time since it has been accepted as a justifiable and legitimate procedure, as that of ovariotomy. This, however, is in the highest sense conservative surgery; and its beneficial results will be continued through all future time. Neither false reports, false diagnosis, nor theory, can ever take from surgical gynæcology this just operation. So long as women are compelled to incur the perils of parturition without the aid of intelligent and skilled accoucheurs, so long will they be liable to lesions which make life a miserable burden to the victim and a loathsome offence to others. In the hands of expert gynæcologists such lesions are now almost certain to be cured. But operations of this character must eventually be left in the hands of the few who have had the opportunity for acquiring the necessary experience and training and who possess the requisite aptitude and dexterity of manipulation.

Brilliant surgical success is necessarily attended with more or less dangerous tendencies; and it should be one of the missions of this society to protect the profession and their patients from such evils. If reckless enthusiasm for the public applause prompt the performance of such as are not absolutely necessary to preserve health or to save life, it must be deemed criminal, and the operator be held responsible for the consequences. "Some one has blundered" will not be a sufficient defence in the execution of the duties of our profession. The sole justification of any operation which involves suffering and danger to the subject must be the strong probability, based upon scientific knowledge, that compensating good will be the result. An operation for the removal of an intra-uterine tumor, which interferes but slightly with the functions of the vital organs, which probably will cease to increase in size after the menopause and may possibly disappear by the conservative processes of nature, cannot be defended, if, on being attempted, it should cause death; (I do not include that class of fibroid tumors attended with severe hæmorrhage), still less, repeated fatal results from operations whose sole object is the problematical cure of sterility; "vaulting ambition, which o'erleaps itself and falls on the other," is aptly suggested. Retribution, sooner or later, must follow. The crushing force of public opinion, moulded by the profession, cannot but prove as terrible a punishment as the execution of the law.

It would not be proper on this occasion for me to discuss the general principles of gynæcology, but it is pertinent to ask what work is now most required in addition to our already accumulated knowledge, and a few suggestions may be acceptable in answer to this inquiry.

While the so-called science of the law is based upon the decision of judges, what is technically termed a digest, it may also be said to represent a practical manual for the whole profession; but with us any such digest of gynæcological science is at present impossible, for there are no authoritative decisions which all are bound to accept, and any attempt to impose the weight of authority will be affected by the mental basis of theory, and will inevitably give undue prominence to certain doctrines, while others are slighted or wholly overlooked. We have yet to determine what the truth is in regard to many of the most important points, on which every day the profession is called upon to decide and act.

Not only the specialist but every general practitioner desires to see settled many questions still in dispute, as to the etiology, the pathology and the indicated remedy. Putting the question in this simple way, we see that it cannot but cover a broad ground in which gynæcology can, as yet, lay no claims to scientific precision, and her

teachings are "a trumpet of uncertain sound." If in theory most of the profession would avow the belief that the pathological conditions of the uterus are of more importance than its changes of position, it would seem that in practice the governing principles of treatment are those which emanate from the school which one of its most ardent enthusiasts has appropriately termed the mechanical system of uterine pathology.

The truth of this assertion is confirmed by a reference to the opinions which appear to govern the practice of the larger numbers of the profession in the treatment of uterine flexions. For instance, do we not find the feeling very common that when these flexions exist, the nervous symptoms are almost wholly due to what is supposed to be malposition, and the treatment invariably directed to the restoration of the uterus? To-day the prevailing treatment will, in the majority of cases, be found to be mechanical. Let us examine what we all prize so highly, the recognized facts in relation to gynæcological practice.

Take the question of uterine displacements and flexions, which for more than 25 years has been a subject of active controversy and discussion. Let us first see what are accepted by all as facts, which have a bearing on this subject. The position of the uterus in the pelvic cavity; its relation to contiguous organs and tissues; its normal mobilty; its change of situation with each deep inspiration; its displacement backward by a full bladder; its quick restoration by the rapidity with which the bladder of the female is emptied; its displacement forward by a distended rectum; the fact that its only unyielding or fixed attachment is that of its lower anterior portion to the bladder, which is contiguous with a similar attachment to the upper part of the vagina, so that in health, the orifice of the cervix corresponds in direction to that of the centre of the distended vaginal canal, are all settled points. The proportionate influence of each adjacent tissue in keeping the organ in its normal relation to other organs and in restoring it to position when physiologically or temporarily displaced, has not yet been definitely determined, and it probably varies to a certain extent in different women. But all agree that certain so-called ligaments, the connective tissue, the vascular apparatus and the vaginal walls each contribute to this end.

That the law of gravitation will govern the displacement of the organ, if there be abnormal increase of its weight out of proportion to the normal sustaining power, is doubted by no one. Then that acute displacement of the unimpregnated organ causes, in some instances, severe suffering, is a fact of common observation. There are some women who are liable to sudden retroversion of the organ, which at once causes severe pain up the whole back, violent headache and a

flushed face, symptoms which are immediately relieved by the restoration of the organ to its normal position.

I have witnessed two cases where retroversion produced positive insanity, one of seven days, duration, the other five, which were relieved by replacement of the uterine deviation. It is also recognized as a fact that various displacements will modify nutritive, neurotic and vascular conditions of the organ. An acute displacement sometimes causes such a congestion as to double the weight of the uterus in a few days, which as rapidly decreases when the organ is restored. On the other hand, all are in accord that the various pathological conditions which result in increasing the weight of the organ or in diminishing the sustaining forces which surround it, cause displacements, and that the cure of the pathological causes is followed by restoration of the uterus to its normal position. Thus we acknowledge that uterine affections may be divided into two classes: one being the displacement of the uterus, and the other its pathological changes (functional derangements being common to both): and that when the one class occurs as a primary cause, the other may follow as a consequence. Gynæcologists, however, differ greatly in their belief as to the comparative frequency and importance of these two classes. If the question could be directly put to all who are specially interested in the study and treatment of these diseases, and the answer be given, after due reflection, as to the influence which parturition, subinvolution, disordered functions, leucorrhœa and constitutional causes have in producing pathological changes, I doubt not that the reply of a large majority would be that the pathological changes much more frequently occur as a primary cause and are much the more important; yet, if one should seek the answer in an examination of the general practice of the profession and a comparison of the efforts made to effect cures by the selection of therapeutical resources, I am not sure that the general expression would not be the reverse. By a rough estimate it has been found that since 1845, one hundred and fifty men have sought immortality by devising new forms of pessaries, descriptions of which have been published.

Do we have any evidence of a corresponding activity in ascertaining the therapeutical treatment of the various organic and functional diseases? I might go still further and ask if even much of the knowledge of the past in drugs is not now overlooked or forgotten? Is not the direct vascular communication between the uterine, the ovarian, the vaginal and rectal plexus usually disregarded by reason of the exclusive study of the diseases of one or the other of these organs? Is not the important relationship which exists between hepatic disorders and uterine affections very generally ignored, as well as the connection which is often overlooked between the hæmorrhoidal plexus

and the uterus? Numerous illustrations must at once occur to the minds of all which will justify me in the assertion that the medical has received much less attention than the surgical treatment of uterine affections. If in theory most of the profession would avow the belief that the pathological conditions of the uterus are of more importance than its changes of position, it would seem that in practice the governing principles of treatment are those which emanate from the school in which mechanics is more lasting than that of medicine.

One of the subjects for discussion in the sectional meeting of the Bureau is that of "changes in the form and position of the uterus," and the therapeutical treatment from pathological indications, and the other that of "symptomatic indications." Considering the etiology of the question, we think the following propositions will be presented.

(1) That flexions in the virgin cause no symptoms except a slight dysmenorrhœa, unless there be some vitiation of the general health, defective nutrition, neurotic disturbances, or pathological changes.

(2) That in some married women, in whom flexion exists, all the functions of the uterus, menstruation, conception, gestation and parturition, are performed without any apparent difficulty due to change of the form of the organ.

(3) In the married, however, these flexions may become a source of irritation, and be one of the factors in producing functional disorders, neurotic disturbances, and pathological changes of structure, not only in the uterus, but in the adjacent tissues.

(4) That mechanical treatment, such as the use of pessaries; or surgical, such as the division of the posterior lips backward, or divulsion, is neither safe nor useful, until all associated pathological conditions, due to antecedent or coincident inflammation, have been overcome. When this has been accomplished you should not be surprised if you find your patient on the high-road to a cure.

(5) All treatment, whether local or surgical, will fail in relieving the disorder, so long as the proper constitutional remedy has not been administered, as the tissue will be deficient in its proper proportion of nutritive elements.

After this, then, are we not justified in asking whether the general neglect of therapeutical treatmemt in gynæcology has not been characteristic of that special practice during the last ten years? Much attention has been directed during the last year, to the operative treatment of cancer of the uterus, and although the results thus far are encouraging, we shall never be able adequately to cope with this terrible malady until the practitioners scattered over the length and breadth of the land have their faculties quickened to appreciate the very *earliest manifestations of the disease*, and even to anticipate its

advent, by a more careful consideration of the predisposing causes which, where a strong hereditary tendency exists, are likely to eventuate in such a condition.

Sir James Paget, in his recent Morton lecture, encourages the hope that we may yet find some medicine as efficient against cancer as mercury against syphilis, especially as the recurrence of the disease is less, not more severe than the primary. Such medicine we have not at present. Can it be reasonably hoped for? Yes, he answers, and the more so if we may count cancer among the specific diseases. Professor Clay, some seven years ago, asserted that he had discovered the long and anxiously sought-for remedy in the form of Chian turpentine. The interest excited in this treatment has to a very large extent subsided, and the hopes once entertained, that at last the cure for cancer had been found, have been surrendered, as failure after failure with the drug in the hands of other practitioners was experienced and reported. Still, lately Professor Clay has reported three cases of cancer of the uterus, cured by his remedy. Surely the history of this drug and its relation to cancer of the uterus, show how anxious the profession regarded the action of remedies and their relation to all forms of neoplasm, either benign or malignant. Too long has the question of therapeutics remained in its present unsettled and unsatisfactory condition.

During the year more or less attention has been given to the surgical treatment of cancer of the uterus, and, while the conditions surrounding the case and the justification of the operation are not questions here to determine, yet we wish to call attention to the surgical treatment based upon the individuality of the growth, its location and character. In isolated carcinoma, if I may be permitted the expression, of the cervix uteri or the fundus, the operation should be and is now modified accordingly, and the operation of vaginal hysterectomy is receiving the major share. While this operation may be regarded as a fresh introduction to gynæcology, the various modifications to which it has been subjected will place it, for some time, with the experimental class. From the original operation, delayed by careful dissection and the annoyance of ligatures, we now have the clamp substituted, and still later, the cautery, which enables the operator to conclude the task within an hour. As the method of procedure is developed and the *time* of the operation lessened, the rate of mortality will improve and hysterectomy will be regarded with less apprehension. Prolonged shock—to borrow an expression—is always detrimental to the recovery of these cases. The other operations for relief of cancer, such as amputation, that of the vaginal portion, while the other, the higher operation, not only amputating the cervix but removing almost the entire organ, leaving a mere shell of the walls

of the organ, each have their advocates, basing their claims upon their personal experience. As I remarked before, the character of the operation depended upon the isolation of the cancer and until recently a rare and imperfectly understood malady. In a monograph by Pichot, the analysis of some eighty cases presents some interesting reports. Since this time, however, 120 cases have been added which, to some extent, have confirmed opinions formed by the former reports. In the sectional meeting this matter will be thoroughly discussed.

The surgical treatment advocated for malignant neoplasms of the uterus, is that of extirpation of the affected organ. Of course this rule applies to that class of cases where surgical interference is not only justifiable but feasible, owing to the fact that the neoplasm is confined to the uterus. Although quite a large number of operations have been reported, it is difficult at present to decide which method should be employed.

Amputation of the body of the uterus after laparotomy, has been repeatedly practiced during the year, and for that matter, during the past five or six years. But the operation is not always possible, to decide how far the disease may have encroached upon the cervical tissue, and after amputation several recurrences have been reported; hence total extirpation of the uterus was, after all, decided upon as the safest method. The various methods for extirpating the cancerous uterus have their followers, with the vaginal procedure, however, in the ascendency. When this is impracticable the operation of Freund is called for. The operation for the relief of carcinoma and epithelioma of the cervix must be defined by the anatomical conception of cancer from a purely medical point of view. While it seemed likely for a long time that histological investigation would furnish us with exact ideas as to the causes of the malignancy of certain tumors, that have for centuries been called cancers, almost the contrary has resulted: for our anatomical comprehension of this most important group of affections has been greatly obscured on the one hand, by the multiplicity of observations, and on the other, by the dispute as to the starting-point of cancerous deposits. Although it is true that the epithelial character of cancerous neoplasms is almost universally acknowledged, by which remark I do not mean to assert that it has been decided whether it is the connective tissue or already existing epithelium of whatsoever variety that furnishes the matrix, yet the mystic formula of "atypic epithelial proliferation" no longer suffices to characterize carcinoma. As before, these neoplasms are still malignant epitheliomata. It is not their morphological constitution, but their biological history, their clinical course, the study of their conduct while still a part of the living organism, and their relations to the latter, which are decisive.

For ages back it has been known that tumors often develop in the uterus, especially in the vaginal portion; that these tumors make their appearance as a rule in later life; that they often break down resistlessly, invading the surrounding tissues, causing hæmorrhage and signs of death, not infrequently giving rise to new deposits in distant organs unconnected with the original site of disease, and that shortly the debilitating influence produces the peculiar cachexia so characteristic of this form of disease. In order to properly appreciate the treatment now resorted to for the relief of this malady, it is essential that the disease be divided in two classes, which we will designate by the old terms of epithelioma and carcinoma. If we employ Klebs' classification, which, as far as my experience goes, conforms most closely with clinical observations, we may distinctly differentiate the flat epithelioma of the cervix, the cancerous ulcer from the papillary variety. We have besides these, the parenchymatous or infiltrated form of cancer of the uterus, which we might as well call carcinoma. Without comparing this classification with Billroth and others, we will only present the differentiation for the purpose of explaining in a more lucid manner the operation which the form or manner of procedure now depends upon the pathological condition found.

The flat epithelioma of the cervix originates from the internal surface of the os uteri, strictly speaking from that part which is provided with transitional epithelium. The deeper epithelial strata of this region penetrate, according to Klebs, into the stroma of the mucous membrane and into the muscular tissue. The more the circulation is affected by the inward proliferation the more rapidly do the epithelial masses on the surface break down, so that we not infrequently find a deeply excavated, crater-shaped ulcer extending up to, or even beyond, the internal os at a time when there is, as yet, no trace of disease on the external surface of the vaginal portion. Every experienced gynæcologist will remember having met with one or two instances of limited epitheliomatous ulceration of the external os, the portio vaginalis seeming to be in other respects healthy; these cases will have appeared to have afforded a good opportunity for amputation through sound tissue, but close examination will have disclosed, but too often, that the cancerous destruction had already extended high up into the cervix and beyond the fornix of the vagina. The deeper the ulceration and the more extensive the invasion of the submucous tissues the greater is the attendant necrosis. Thus we have, to speak more correctly, after removal of epithelioma in the portio vaginalis, or not infrequently find, fresh cancerous nodules developing higher up in the uterus, although there is no recurrence of the epithelioma *in loco*. For these reasons it is also exceedingly difficult to determine, with any degree of accuracy, the

frequency with which epithelioma and carcinoma of this portion of the uterus may occur. If the soft tissue of the pelvis or the retro-peritoneal lymphatic glands become involved, the question of operation becomes at once individualized and the nature or character of the operation governed accordingly. The palliative treatment of cancer of the uterus is also placed among the "legitimate" operations. It certainly postpones the fatal result, and the copious, exhausting discharge of blood is at once controlled. This simple procedure often affords great comfort and ease for some time and should be resorted to whenever the condition justifies. The prognosis of the probable result, however, should never be neglected by the attending physician, as it may save him an embarrassing scene later on.

The various methods of performing vaginal hysterotomy depend upon, as we have said, the individuality of the case, but the manner of removing the cancerous organ has recently undergone quite a change and much for the better, as valuable time is saved, a very important feature in all grave operations, and hæmorrhage completely controlled. Instead of the slow, tedious method of separating by dissecting the tissue of the uterus from that of the bladder in front, and the rectum behind, an opening or perforation of the vaginal tissue or wall in the anterior cul-de-sac with Küchenmeister's scissors, and then with a bulb-pointed bistoury the opening is enlarged to the desired size without any fear of perforating the bladder or rectum, in fact, doing any mischief with the point of the knife, as could be, and has been done, if it were sharp-pointed. The second improvement is the serrated scissors, curved slightly on the flat, which enables the operator to rapidly sever all connections between the uterus and other tissues. By keeping the concave surface of the scissors toward the uterus you can comprehend how easily everything may be divided until the broad ligament has been reached, on both sides. During the operation, the organ is held firmly in place by a good-sized vulsella, the third improvement made expressly for this purpose. As soon as the parts anteriorly and posteriorly are prepared for severing the broad ligaments, the major part of the operation, a large clamp—fourth improvement—slightly curved on its flat, like the serrated scissors and insulated on the concave side, and about nine inches long, with a strong pair of jaws (serrated, too) the ligaments are seized firmly by the clamps and then the distal end, next to the uterus, is cut with the serrated scissors and the severed margins exposed and cauterized thoroughly. After treating the other side in the same manner, the operation is about completed. By omitting the use of the ligature and the dissecting process, now so generally employed, a half hour may be saved, which is an important factor in an operation of this character. A full description of

this operation will be found in the *Homœopathic Journal of Obstetrics, Gynæcology and Pædology.*

Heat, in its various forms, especially the hot-water douches, is still a favorite adjunct in the topical treatment of uterine disorders. In the application of heat, the question of selection or individuality again presents itself; some diseases responding more quickly to moist, while others better to the use of dry heat. The universal problem with the gynæcologist has been to solve the method of conveying heat to the endometrium without producing ill effects, like colic or inflammation. We now have perfected an instrument which will conduct heat to the uterine cavity at any desired temperature without discomfort or injury to the patient. With this acquisition, the gynæcologist is now placed in a favorable position to combat many of the maladies which now not only require extended time to cure, but often baffle the skill of the operator. This principle may be carried to treating diseases of the bladder and rectum as well. The close relationship existing between the various organs of the pelvis renders a relief in the instance of a pathological change in one, a corresponding assistance to the others. Thus, if we have a case of areolar hyperplasia, we usually have associated rectal complications and some vesical irritations. Relief from the uterine congestion brings more or less help to the others. In the use of the heat we have one of nature's grandest measures of curing congestion, and although the terms of heat and cold are simply relative in their application here, the value of the treatment can only be approximated when we venture the remark that almost all uterine disorders—true uterine diseases—can be cured, or materially benefited, by the use of this intra-uterine heat treatment. As the treatment has not yet passed beyond the experimental stage, it may be premature to add that we believe it will soon supersede almost all local application to the endometrium. Since Dr. Brinkerhoff startled the medical profession and interested the general public by issuing an unethical and unscientific pamphlet on the subject of rectal diseases there has been a spasmodic awakening, so characteristic of that profession, to the realization of the neglect in study and the treatment of these diseases; and now the pendulum is swinging too far in the other direction; and yet while there is danger, we must confess we are still in the dark, and not unlike Lyster, while the theory may be fallacious, the good effect is apparent and the medical fraternity, although for some years past it has been laboring under the iron heel of patents covering instruments, combinations of drugs and treatment, cannot but appreciate the innovation and give it all the credit it deserves. By recent investigation we now know that we have at hand a new process of treatment by new instruments and the dry heat, not clogged with

weighty patents, that gives the profession an advantage over the so-called "Brinkerhoff system."

The treatment of fibroid tumors has met with some change, and although confined principally to electricity, records, discussing the treatment and detailing the results, show that there is a decided advantage in favor of this manner of treatment; but the treatment must be necessarily limited to the few, on account of the character and intricate manipulations demanded. Statistics show a mortality which indicates there is a risk to assume with each treatment which will, from its nature, preclude electrolysis from becoming popular.

The successful medical treatment of uterine fibroids is still engaging our attention, but with as little prospect of solving the problem as in years past. How to dispose of these neoplasms, without the aid of the knife and electrolysis—both dangerous—is still a conundrum. When Sir J. Y. Simpson electrified the profession by announcing that fibroid tumors could be cured by the administration of Bromide of potash in sufficient doses to produce atrophy of the growth by contracting the capillaries of the arterial circulation, he put forth a fallacious theory.

Then came Ergot, with part of the same theory, notably that of arrest of the circulation, hoping the tumor would, as it was of the lowest form of living tissue, undergo fatty degeneration; or, if administered in connection with Iodide of lime, become calcified. These have not, so far, been demonstrated. The giving of the Iodide of lime alone stimulates the capillary circulation, thereby absorbing the tissue of the neoplasm. But, as is often the case, these tumors may spontaneously disappear; coincidence must have its credit, and be given due consideration. If the indicated drug, prescribed from the totality of the symptoms, be administered, more fibroid tumors will be cured by internal medication than has ever been reported before. This I feel certain of, after a few years' practice after the last manner, comparing it with my previous treatment and results.

No one can, Mr. President, accuse us of belonging to the I. H. A., or of having thoughts in common with its members; but we do love the *truth* in medicine, for upon it our salvation depends as a successful and distinctive school of medicine. When some of the old homœopathic practitioners of "ye olden days" introduced the subject of symptomatology in the treatment of the management of displacement of the uterus, they opened the door to a great revolution in gynæcology, which, although doomed, as most innovations of that character are for a time, to death, nevertheless, an insignificant spark was left, sufficient to keep alive the subject; and to-day, our clinical lessons on diseases of women confirm the teachings of our

predecessors, which were, oftentimes, brought forward under the most trying circumstances; and now, at our disposal we have the accumulated experience of these noble workers for the mere cost of study. Could those who so faithfully outlined their work, and honestly—yes, honestly—reported their failures as well as their cures, witness the reception of their labor, it does seem as if they would cry out, "Oh, Lord, my trials are greater than I can bear!"

Be it said, to our shame, that we have gynæcologists who to this day believe nothing, treat nothing, in the form of disease, except by a method which has based upon it the well-known physiological and pathological law laid down in the system of the so-called "regular practice."

It is not in my province now to consider the method of treatment of "diseases peculiar to women," by our old-school friends, but we will add, in passing, that symptomatology cannot any longer be ignored; but we shall emphasize this statement, *that in the hands of the ignorant and selfish, unqualified, misrepresenting practitioners*, this wonderful department of medicine (symptomatology) is subject to all kinds of failures; but like our beloved law of *similia*, the failure should be charged *to the individual physician, not to the system.* Still, if the ignorant practitioner will continue to report cases as "cures," which we know are utterly impossible, mechanically or physiologically, just so long will the study of symptomatology, and its application to the treatment of gynæcological disorders, by all honest men be regarded with suspicion and held in disrepute. Rectal disorders, simulating uterine symptoms, must now be studied more closely and carefully; and instruments have lately been perfected which will enable the physician to extend his examination much higher, and thus may be found some pathological lesion which has for years baffled the skill and ingenuity of the attending physician, because the symptoms pointed so conclusively to the uterus or its appendages.

In our reports for the year we hope to present some interesting studies on the various subjects under the general title of uterine therapeutics, which may, we hope, stimulate further investigation in this field so sadly neglected by all schools of medicine, and yet if only properly developed is sure to bring forth good fruit, which will be fully appreciated by the profession. In no department of medicine are we more lamentably weak than in that of the subject we are to consider in our sectional meeting. Let us, therefore, give our united experience in this direction, and by so doing we may establish some uniformity of study and practice, instead of being compelled to rely, as at present, upon empiricism like our brethren of the old school.

The President appointed Charles Deady, M.D., of New York, N. Y., Chairman of the Bureau of Ophthalmology, Otology, and Laryngology; and Albert Claypool, M.D., of Toledo, O., Chairman of the Bureau of Gynæcology, for the year 1889.

The Board of Censors made a further report on applications for membership (see Report of the Board), after which the Institute adjourned.

The Sectional Meeting in Gynæcology

Was convened at 11.18 A.M., Philip Porter, M.D., of Detroit, Mich., Chairman of the Bureau, presiding. The general subject was "Uterine Therapeutics," and the following papers were presented and discussed:

"Changes in the Form and Position of the Uterus—Treatment, Extra-medicinal," by O. S. Runnels, M.D.

"Changes in the Form and Position of the Uterus—Symptomatic Indications," by George R. Southwick, M D.

"Neoplasms of the Uterus—Pathological Indications," by Lucy J. Pike, M.D.

"Nutritive Disturbances—Pathological Indications," by E. M. Hale, M.D.

"Nutritive Disturbances—Symptomatic Indications," by B. F. Betts, M.D.

(For papers and discussions, see full Report of the Bureau.)

THIRD DAY—AFTERNOON SESSION.

Sectional meetings were held simultaneously by the Bureau of Ophthalmology, etc., and the Bureau of Obstetrics.

The Sectional Meeting in Ophthalmology, Otology and Laryngology

Convened at 3 o'clock. In the absence of Joseph E. Jones, M.D., of West Chester, Pa., Chairman of the Bureau, Bushrod W. James, M.D., of Philadelphia, presided. The general subject of considera-

tion was, "Acute Inflammation of the Eye, Ear, and Throat, and their Consequences." The following are the titles of papers presented and discussed:

"Results of Acute Diseases affecting the Pharynx and Larynx," by H. H. Crippen, M.D.

"Corneitis and Conjunctivitis, and their Consequences," by B. W. James, M.D.

"Cyclo-iritis," by H. K. Bennett, M.D.

"The Eye a Factor in Functional Nervous Diseases," by F. Park Lewis, M.D.

"Treatment of Conjunctivitis-vernalis," by George S. Norton, M.D.

"Acute Sero-hæmorrhagic Inflammation of the Middle Ear," by Charles Deady, M.D.

"Reform in the Measuring and Recording of Vision," by Harold Wilson, M.D.

"Inflammation of the Throat and Ear following the Removal of Nasal Polypi," by E. B. Hooker, M.D.

"Complications and Sequelæ of Corneal Ulcerations," by E. H. Linnell, M.D.

"The Treatment of Ocular Conjunctivitis," by H. C. French, M.D.

"Otitis and Frontal Headache," by John C. Morgan, M.D.

"Complicated Cases, with Suggestions," by A. M. Cushing M.D.

(For papers and discussions, see full Report of the Bureau.)

The Sectional Meeting in Obstetrics

Also convened at 3 o'clock, George B. Peck, M.D., of Providence, R. I., Chairman of the Bureau, presiding. The general subject was "Accidental Complications of Gestation," and the following papers were presented and discussed:

"Traumatic Complications," by Sheldon Leavitt, M.D.

"Pulmonary Complications," by T. F. H. Spreng, M.D.

"Nervous Complications," by Emily V. D. Pardee, M.D.

"Typhoidal Complications," by E. P. Scales, M.D.

"Placental Complications," by J. B. G. Custis, M.D.

"Cardiac Complications," by L. P. Sturtevant, M.D.

"American Women Childing," by George P. Peck, M.D.

(For papers and discussions, see the Bureau Report.)

THIRD DAY—EVENING SESSION.

The Institute reassembled at ten minutes past 8 o'clock, the President in the chair.

The Board of Censors submitted the names of applicants heretofore announced, and the applicants were elected to membership. Names of additional applicants were announced.

The Address in Materia Medica and General Therapeutics

Was delivered by A. R. Wright, M.D., of Buffalo, N. Y., Chairman of the Bureau, as follows:

Mr. President:

A rule of this Institute makes it my duty to note at this time the progress of materia medica and therapeutics for the past year. Distributed through all our journals, there is such an abundance of material on these two subjects that it would be impossible for me to collate it or make a proper selection. Neither is this the place nor do we have the time to make a critical review of the formal publications on the same subjects. We simply make note of them as follows: the first being two numbers of the Cyclopædia of Drug Pathogenesy, which with its comprehensive scope and grand compilations has had recognition by this Society and has been so generally considered that it is not necessary to mention it here farther than to wish it a God speed. We have also the satisfaction of welcoming two more volumes of Dr. Hering's Guiding Symptoms of Materia Medica. They have been ably and faithfully edited by the committee chosen for that work. Its great value as an assistant to correct individualization is generally recognized.

But the event of the year past in publications in this department is the appearance of "A Clinical Materia Medica," by the late Dr. Farrington, edited by Dr. Clarence Bartlett, and revised by Dr. Lilienthal. "The volume thus presented to the profession is a worthy monument to the originality, the enthusiasm and the indefatigable energy of the author." At first sight the work is fortunate in arresting intelligent thought by its grouping and comparison of remedies. Each student finds something to interest him, as well as assist him in the study of his case.

The fact of these lectures having been phonographically reported, and afterwards edited by one in thorough sympathy with the subject

and also who had access to all the author's manuscript, gives a sure guarantee that the volume reflects the teachings of Dr. Farrington.

"Salient Materia Medica," by Dr. C. S. Cleveland, presents the subject in a new and experimental way by the author's happy treatment of 197 remedies in all.

This list would not be complete without a mention of Dr. Conrad Wesselhoeft's modest little volume, "How to Study Materia Medica," giving some original views on its study. This contribution whets one's appetite for more from the same faithful worker. We can welcome all these as assistants to correct prescribing. We need the different views, comparisons and contrasts of remedies, each view commending itself pre-eminently to a certain class of student mind.

On Therapeutics we note the monograph of Dr. D. C. Perkins on "Homœopathic Therapeutics of Rheumatism and Kindred Diseases," and "Treatment of Diseases of the Spinal Cord" by Dr. P. Jousset, translated by Dr. Helen Coe O'Connor. There may be other monographs on therapeutics which have escaped my attention. With some members of this Institute there seems to be a growing desire that increased attention shall be given to the improvement of our work in Materia Medica. But work in this direction will not increase simply by willing it or passing a resolution to magnify this department. Our individualization as a society lies in this direction. It is the only feature that characterizes us as homœopathic, while about four-fifths of our forces are expended in other directions than materia medica and therapeutics. In other departments, old-school societies work equally with us, but in these we can defy their competition for we have a more excellent way. A recent essayist in the American Medical Association asserted and deplored the neglect of therapeutics in their ranks also, while they have been developing well equipped scholars in all the specialties and in the sciences collateral to medicine. In materia medica and therapeutics homœopathy has a special mission. How can this Institute fulfil such mission and bring the work of this Bureau up to its proper level?

I am not here to criticise past neglect or dictate to you plans of campaign, but would suggest that some plan be adopted by which we could bring the bed-side work of our members generally into the exercises of this Bureau. To this end, we sent out a circular note to the journals asking for clinical memoranda to be presented this evening. While materia medica is our peculiar specialty, we should remember, that the careful proving of remedies lies at the foundation of our therapeutics. In this respect our materia medica stands like a monumental shaft of the nations based on "*similia, similibus, curantur,*" its inscriptions, but partially chiseled, leaving abundant space for addi-

tional lettering from provings of remedies, and yet when all is properly done, the medical monolith will be just as unique in character as it was before. Let these inscriptions be so carefully selected that our successors may make their study a blessing to mankind through the ages to come. But the provings of remedies and their after arrangement make such a tedious and routine work, that very few practicing physicians are willing to take it up. Lately undergraduates have been looked to for provings, and we have expected provings from the classes of three colleges, but not one of them appeared. We are now satisfied that neither the students nor their professors have the time to do such work during the session, and we would propose the following plan:

1st. That each class of our colleges be asked to form a Prover's club, after graduation, to act under the direction of our Committee on Drug Provings, forming at once a happy link between the colleges and this Institute, thus increasing the *esprit du corps* of the post-graduates and alumni.

2d. To make such appear to be properly referred, we propose that the title of the Committee on Drug Provings be made to read, "The Committee on Supervision of Drug Provings."

3d. That the chairmen of the committees of Drug Provings and of Pharmacy, and Bureaus of Materia Medica and Clinical Medicine, form a permanent committee of conference to formulate a scheme for perfecting this work.

4th. That the homœopathic medical journals be requested to collect and publish verifications of provings of remedies chosen each year for study.

One year ago this Bureau chose for its subject of study, Zinc and its salts in diseases of the nervous system, and in uterine diseases, and essayed some provings, re-provings and verifications of the same. The force and propriety of this selection is apparent when we look into Allen's Cyclopædia, supposed to contain a full report on provings, and find that under Zinc acetate, out of 65 symptoms, 43 are the effects of gross doses; Zinc cyanide has only 9 symptoms altogether; all the symptoms of Zinc chloride are from the effects of massive doses, not one from a proving; Zinc phosphide also has no proving; symptoms are from effects of three massive doses. Of the 127 symptoms of Zinc sulphate not more than 20 can claim to be from provings, and finally of the 1800 symptoms of Zinc itself, not one-half would appear to be from provings and in the whole list of authorities on Zinc and its salts, not one American proving is found. So we have asked for provings or re-provings of these drugs, with the request that each director of provings observe the directions laid down

in Hahnemann's Organon, also use the drug at or below the sixth attenuation, and use the sac. lac. test on each prover.

The Institute then adjourned, and at 8.30 o'clock

THE SECTIONAL MEETING IN MATERIA MEDICA AND GENERAL THERAPEUTICS

Was held. A. R. Wright, M.D., of Buffalo, N. Y., Chairman of the Bureau, presided.

The "General Subject" of the Bureau report was "Zincum and its Salts." The following papers were presented and discussed:

"Zincum in Diseases of the Eye," by W. E. Leonard, M.D.

"Verifications of Zincum," by A. M. Cushing, M.D.

"Zincum and Sepia—A Comparison," by H. C. Allen, M.D.

"Provings of Zincum Aceticum," by Sarah N. Smith, M.D.

"Zincum in Ovarian Diseases," by Corresta T. Canfield, M.D.

"Zinc and its Salts in Cerebral and Spinal Diseases," by S. Lilienthal, M.D.

"Provings of Zincum," by W. S. Gee, M.D.

(For papers and discussions see Report of the Bureau.)

FOURTH DAY—MORNING SESSION.

Thursday Morning, June 28th, 1888.

The President called the Institute to order promptly at nine o'clock. On motion of Dr. J. P. Dake, it was

Resolved, That in the making up of lists of existing journals and institutions in any way illustrative of Homœopathy by the Bureau of Organization, Registration and Statistics and the Committee on Medical Literature, all such shall be embraced as recognize the homœopathic principle; that no journal or institution thus listed shall be stricken off without a distinct statement, through the General Secretary to the Senate of Seniors, of the charges brought against it, and then not without due notice and opportunity for defence on the part of the journal or institution under censure, final action on the case being deferred until the succeeding annual meeting; but the name

of any journal or institution may be dropped from the list without ceremony after having failed to make report to the Institute for three consecutive years.

Dr. O. S. Runnels offered the following;

Resolved, That the motion adopted last year, relative to the censure of the New York Medical Times from the list of Homœopathic Journals, be and the same is hereby rescinded. Adopted.

The Committee of Conference on the Further Improvement of Medical Education

Reported progress, and on motion the report was accepted and the Committee continued.

The Report on the President's Address

Was presented by D. H. Beckwith, M.D., Chairman of the Committee, as follows:

The Committee appointed to report upon the President's Address, take pleasure in recommending it to the members of the Institute, as an able and scholarly contribution to our proceedings, an outspoken plea for pure homœopathy, as pregnant with valuable suggestions well worthy our earnest consideration.

1. Therefore, while we fully indorse the recommendations on medical education contained in the President's Address, your Committee recommend, that, in accordance with a resolution on page 62 of the Transactions of the year 1887, we refer said suggestions made by the President to the Committee on Medical Education as therein provided, and request said Committee to report to the Institute at this session.

2. Your Committee on considering the President's recommendations on papers and discussions, respectfully report that the standing resolution adopted by the Institute, July 18, 1887, would not be essentially improved by changing its wording as suggested in the address. We recommend that no change be made at the present time.

3. Your Committee would limit the President's recommendations relative to the publication of papers, to the Medical press exclusively; and the right to publish the papers after they have been duly received and referred at a meeting of the Institute.

4. We approve of the recommendation made concerning the pub-

lication of the daily proceedings by the press, provided they be indorsed by the Secretary as official.

5. It seems to the Committee that the unreasonable restrictions that have so long fettered the President in the choice of the subject-matter of his Annual Address, have, in the advancement of an enlightened and progressive age, no longer the grounds of justification, and that in the future the President may have a wider range for a practical and scientific address, we ask the Institute to modify Art. 3, Sec. 1, of the By-laws, so that the President may deliver an address that will meet the demand of the members; therefore

Resolved, that there be added to Art. 3, Sec. 1, the words "and he may also consider any subject relating to medical science."

D. W. BECKWITH,
C. WESSELHOEFT,
GEORGE F. ROBERTS.

The report was accepted and all its recommendations were adopted except the *third*. For this a substitute was offered and adopted, providing—

That Sec. 9, Art. 7, of the By-laws be amended by striking out the words "previously published," and inserting "published previous to its presentation to the Institute."

The Committee also presented a supplementary report, recommending that the matter referred to the Committee from the Bureau of Organization, be referred to the Committee of Publication, as it was not deemed best to act upon it at this time. Adopted.

THE REPORT OF THE COMMITTEE ON MEDICAL EDUCATION

Was read by the Chairman, T. Griswold Comstock, of St. Louis, Mo., and was accepted and referred to the Committee of Publication. Following is the report as presented:

In making this report, we have a duty to perform that we assume with the greatest diffidence. The able report made by your Committee at our last meeting, would seem to be sufficient if their recommendations were carried out by our medical colleges. Your last Committee divided medical education into three periods, viz.: preparatory, collegiate and post-graduate, and we will formulate our report upon this classification.

If, hereafter, the principle is strictly adhered to, to accept no

matriculant who has not a good education, we shall not in the future be necessitated to be "put to the blush," as has been the case in the past.

The public at the present day are much more exacting in their demands for medical men whose education is of a high order, and who possess general knowledge as well as technical skill, than they were in times gone by; and the young doctor who settles in a community of acknowledged intelligence, should be cognizant of these facts, and know that he must have some special merit, coming through and by virtue of a thorough education, to entitle him to a complete recognition from the people, and a favorable reception from professional competitors.

It is a trite saying, that "it is an angelic pleasure to grow in knowledge," and the laity of the present time already appreciate the fact, that the more perfect the physician is in science, he will relatively be more exact and adroit in the practice of his art; and, if he is lacking in the essentials of a finished medical education, he will never be able to reach the highest aims and noblest ends of his profession.

What, therefore, shall be required of a student who proposes himself as a matriculant in a medical college, and is a candidate for the degree of doctor of medicine? Personally, we say that the applicant, if he is not a graduate of some college or other institution of learning, should at least have a good English education, that will include mathematics, outlines of history, ancient and modern, a knowledge of geography, physics, physiology, and elementary chemistry; and, in addition to the above, we earnestly recommend that he should be conversant with Latin and Greek, or at least one foreign language. When a student comes without any academical testimonials, or first-grade teacher's certificate, an examination should be made upon the above-named subjects, excepting in Latin and Greek. The American Institute is recommended to insist that medical colleges shall enforce the above preliminaries before a student can be enrolled as a matriculant for the college degree.

We recommend that every institution whose diplomas we recognize hereafter, shall require the candidate to study medicine four years, and take three courses of lectures before making application for the degree of doctorate; and the term of lectures in the college-course shall be uniformly for a period of not less than six months, thus making a complete semester, in accordance with the custom so long prevailing in the old country. We would earnestly recommend, however, that the term be prolonged to at least nine months.

We recommend that every medical college shall have a working laboratory, where chemistry and pharmacy can be thoroughly and

practically taught, and shall, as occasion may require, give additional lectures upon collateral subjects connected with the science of medicine, so that the student may be kept thoroughly informed concerning all the latest advances in our profession.

We also recommend, in addition to the therapeutics of medicine, whereby the student is grounded in the "law of cure" as enunciated by Hahnemann, that the therapeutics of other schools shall be explained, and the student will be thus prepared to give "a reason for the faith that is within him." The late Dr. Hemple, in his inaugural thesis for the degree of doctor of medicine (years ago) quoted the well-known aphorism of Horace: "nullius addictus jurare in verba magistri," to illustrate his entire freedom of thought, that it was not required for a physician to be limited to the exact teachings of his masters. Let our colleges keep up with all scientific advances, and our motto be, "scientia et veritas sine timore," and let us teach our students "the best that has been thought and taught by medical philosophers and authorities of ancient and modern times," and our graduates will then form a veritable "corps d'élite."

When we send out such physicians, they will be so disciplined as naturally to develop self-culture, which above all other characteristics is the one that will in practice not only give precedence and success, but, finally, eminence in the profession. Such physicians will naturally avail themselves of post-graduate instruction, in accordance with the aphorism, "qui non proficit deficit." To become an accomplished physician, medical teachers should impress upon the student that he must have a proper ideal of what is requisite to succeed and become eminent in the profession,—"no perspective, no ambition,"—and we take this occasion to quote Hahnemann's words, as to the necessity of those who intend to practice medicine to thoroughly master it.

Hahnemann says: "When we have to do with an art whose end is the saving of human life, any neglect to make ourselves masters of it becomes a crime." *Hufeland*, contemporary with Hahnemann, says: "The healing art is, therefore, something sublime and really divine, and its duties require resignation and an elevation of mind far above worldly desires." Even old Hippocrates gave six rules for the education of physicians, and they are not inappropriate at the present date. We will give a resumé of them in the following words:

I. "Natural talents, and a genius adapted to the science and art of medicine."

II. "A good preliminary education, so that he can study the whole circle of science, and be a master of his profession."

III. "He must have a competent instructor."

IV. "He must begin the study of medicine at an early age."

V. "He must be industrious and combine the love of labor with an emulation for all that is amiable and praiseworthy."

VI. "He must have ample and sufficient time, to continue long in study" (equivalent, at this day, to post-graduate study).

Verily, we cannot improve much upon the requirements of Hahnemann and Hippocrates.

The State Board of Health of Illinois (a prominent member of which is one of our honored seniors) has done very much to raise the standard of medical education in that State, and its influence in elevating the profession is already felt in other States. In a report made by its Secretary, Dr. Rauch, upon medical education in 1886, he thus speaks of those graduates who attended three courses of lectures in medical colleges before receiving their degree: "I have followed up with special interest and care the cases of 789 out of 1000 physicians who studied medicine four years, and attended three terms before graduating. These are with few exceptions the prominent members of the profession in the different communities where they reside. They are well equipped by general education, by an ample period of professional study, by didactic and clinical instruction, and by hospital practice." These expressions, coming from such authority, ought to remind medical professors of their duty, and likewise incite medical students not to make too much haste to attain their degree, but to take more time, and make themselves proficient and accomplished before applying for it. In this report we have not made any recommendation regarding the proposal to take the power of granting degrees from the medical institutions, and give it to a State Board of Examiners, who are properly commissioned for that purpose. For the present such a proposal is not practical, but in time it will come, and we shall hail its advent with pleasure. In the meantime, while we are waiting for the completion of such a plan (which, in our own opinion, will elevate the standard of the profession), let us see to it that every graduate of our colleges in the future shall be so disciplined, and fitted by a higher education, that they will pass, with honor and praise, any State-board examination that may be hereafter instituted.

In conclusion, to sum up and enforce the foregoing recommendations, we offer the following and ask its adoption:

Resolved, That, from and after the year 1890, the American Institute of Homœopathy will not recognize the diplomas of any college requiring less than four years of study and attendance upon three annual courses of lectures of at least six months each.

Respectfully submitted,

T. GRISWOLD COMSTOCK, M.D.,
Chairman.

The recommendation and resolution contained in the report were on motion deferred until after the report of the Intercollegiate Committee.

The Committee on Medical Education for next year was then announced, as follows: Dr. O. S. Runnels, chairman, with Drs. T. G. Comstock, T. Y. Kinne, D. H. Beckwith, R. W. McClelland, L. H. Willard and C. B. Kinyon.

THE REPORT OF THE INTERCOLLEGIATE COMMITTEE,

Being next in order, was presented by the Chairman, I. T. Talbot, M.D., of Boston, Mass. The report, which was accepted and referred to the Committee of Publication, is as follows:

The past year has been one of unusual prosperity with the medical colleges of our school. The action taken two years ago by which every college represented in this Committee requires an examination of its students preliminary to matriculation, was a step which has improved the character of the matriculates and has commanded increased respect for these schools alike from our friends and opponents.

The number of students has been even larger than in many years before this plan was adopted, and nearly four hundred have been graduated this year.

There has been in the past a steady improvement—by the gradual lengthening of the required term of instruction. Eight of the fourteen colleges require for graduation an attendance upon three annual courses, and in three of these the yearly term has been increased to eight and nine months.

The Intercollegiate Committee have to report a still greater step of progress in which all the colleges join by the adoption unanimously of the following resolution:

"*Resolved*, That, after the college sessions of 1890–91, each and all of the homœopathic schools of America will require of their candidates for graduation at least three years of medical study, including three full courses of didactic and clinical instruction of at least six months each."

Thus all students who enter any of these colleges after the present year will do so under the requirements of this resolution.

To carry out this resolution fully and successfully will require the hearty coöperation and assistance of this Institute and the profession

generally. With such aid our colleges will take the front rank in the medical education of this country.

Respectfully submitted,

I. T. TALBOT,

Chairman of Intercollegiate Committee.

NIAGARA FALLS, June 28th, 1888.

The following resolutions were appended to the report.

Resolved, That the American Institute of Homœopathy heartily endorses the report and action of the Intercollegiate Committee in requiring from all graduates from medical colleges after the sessions of 1890–91 at least three years of medical study, including three full courses of didactic and clinical instruction of at least six months each.

Resolved, That this Institute will, after 1891, require from all applicants for membership graduating after that time a full compliance with the above requirements for graduation.

The question on the adoption of the Committee's resolution elicited a discussion as to whether the minimum course of study should be three years as provided in the resolution, or four years as recommended by the Committee on Medical Education. The resolution was finally adopted as presented.

The resolution of the Committee on Medical Education was then amended by changing the date "1890" to 1891 and the term "four years course of study" to "three years." It was then adopted.

A communication was received from Dr. C. Neidhard, of Philadelphia, regretting his inability to be present at the meeting, and presenting to the Institute a copy of his "Pathogenetic and Clinical Repertory of the most Prominent Symptoms of the Head." The work was accepted, and the Secretary was instructed to express to Dr. Neidhard the thanks of the Institute.

Dr. T. G. Comstock moved that the Secretary be instructed to make a complete roster of the members of the Institute, with the medical colleges where they graduated and date of graduation, said list to be published in the TRANSACTIONS.

Dr. T. F. Smith, of New York, said that the Bureau of Organization, etc., had been instructed last year to prepare a complete list of *all who had ever been* members of the Institute, with the date and

place of graduation, admission to the Institute, decease, etc. This list had been prepared at great cost of time and labor, and to throw it aside in favor of a different project would not be courteous to the Bureau. He therefore moved, as a substitute for Dr. Comstock's motion, that the list of present and past members, as ordered by the Institute last year, and prepared by the Bureau of Organization, Registration and Statistics, under the direction of the Institute, be published in the next volume of TRANSACTIONS. The substitute was adopted.

The Board of Censors presented a further report of applications for membership.

Dr. R. Ludlam presented a memorial from the Women's Christian Temperance Union, which was received and referred to a committee consisting of Drs. R. Ludlam, J. B. Wood, and J. P. Dake, to report upon at the next session of the Institute.

THE REPORT OF THE DIRECTORS OF PROVINGS.

Was presented by Charles Mohr, M.D., of Philadelphia, Chairman of the Board. On motion the report was accepted and referred for publication, with the exception of those provings made by a single prover only. Following is the report as referred:

MR. PRESIDENT:

When, by rotation in office, it became my duty to assume the chairmanship of this most important board, I was confronted with the same difficulties that have discouraged others in the particular work given us to do. Appeals were made to the Pennsylvania State Society, to the Philadelphia County Society, to medical clubs, and to individuals, to arouse them to a realization of the necessity of systematic and continuous provings of drugs, if the homœopathic profession would keep on leading the medical profession at large, in the application of drugs to disease.

Notwithstanding the cry of a great number of physicians, that the vast bulk of the materia medica, as published to-day, is a monument of chaff, and the cry of the so-called symptomatologists, of which there are not a few, that the recorded effects could never be

too large for a Hahnemannian, there was not a single man to respond to my appeal.

I found, also, that it was almost useless to appeal to my college classes, and, on writing to my colleagues in other colleges, asking them to enlist students in the work of proving, the invariable reply was, in effect, that nothing could be accomplished.

I was about to give up in despair, and to doubt the sincerity of the demands for any other than the existing materia medica, but concluded to make still more strenuous efforts to prevent a default on the part of the board. I therefore placed myself in communication with over a hundred individuals, mostly students of the Hahnemann College of Philadelphia, furnishing them with all the necessary directions, with blanks, and with medicines; giving them no possible excuse for a refusal to prove drugs, except sickness or disinclination. The labor was necessarily great, hundreds of queries had to be answered by letter, my energies were severely taxed, but as a result I present to the Institute the following provings:

Thirteen provings of *Chininum arsenicosum*, by eight individuals.

Nine provings of *Zincum metallicum*, by six individuals.

Four provings of *Zincum iodatum*, by four individuals.

Two provings of *Zincum phosphoricum*, by two individuals.

Two provings of *Zincum valerianicum* by two individuals.

I chose Zincum and some of its salts, at the earnest request of Dr. A. R. Wright, Chairman of the Bureau of Materia Medica, believing with him, that, so far as possible, the bureau and directors of provings should act in concert.

The above provings were submitted to the board, and it was resolved to ask their publication in the TRANSACTIONS. To determine whether the effects, as recorded, are due to the drugs, must be decided after further experimentation and a critical analysis, and to this work the committee has decided to direct its energies during the coming year.

The Committee, likewise, ask the publication of the following provings, I submitted last year, viz.:

Eight provings of *Lilium tigrinum* by six individuals.

Two provings of *Adonis vernalis* by two individuals.

For the information of members of the Institute, I state that, in the case of all the provers, a preliminary record was made to ascertain their condition and peculiarities, and at the same time to ascertain their powers of observation. This examination is made in accordance with the following blank:

BLANK I.

Prover's Preliminary Record.

Name.....
Residence.....
Married or single.....Ocupation.....
Color.....Sex.....Age.....
Height.....Weight.....
Constitution, inherited or acquired.....
Temperament, sanguine, nervous or lymphatic.....
Idiosyncrasies, mental or physical.....
Former diseases.....
Use of stimulants.....
Use of narcotics.....
Normal pulse, lying down.....Sitting.....Standing.....
Normal respiration.....
Normal temperature, morning.....Evening.....
Urine, habitual quantity and character.....
Stools, habitual condition.....
Drug.....

A control test, with *Saccharum lactis*, was made in all cases before, and in some cases during, the drug test. The drugs were made by Boericke & Tafel and Lewis Sherman, and varied in strength from 10 grain doses of the crude stuff to 1 drop doses of the 30th dilution, but the large majority of the preparations were the 1^x, 2^x, and 3^x triturations, in doses of from 1 to 5 grains. No prover knew what drug he was taking.

It is worthy of notice that, in a majority of the provers, no symptoms were elicited under the sac.-lac. test; in a few the symptoms were meagre in the extreme, and in only one case were they of any consideration. Such symptoms as appeared under the control test are not given in the records of provers, and I have excluded, also, such as appeared under drug test when they were like the former. It is to be observed also that the susceptibility to drugs varied, and that tolerance in a few instances was soon established. Negative provings are also noticed and here reported, as I believe they may prove of considerable value as showing non-susceptibility to certain drugs, due to temperament, environing circumstances, states of weather, etc.

The following were the rules governing the provings:

BLANK II.

Rules for Provers.

1. Fill out the Prover's Preliminary Record on blank herewith furnished.

2. During the proving, live as ordinarily as to diet, exercise, sleep, etc., and avoid everything that may interfere with or vitiate the drug effects.

3. Use a separate sheet for the record of each day of the proving, and write on one side only.

4. Note the time of the taking of each dose and its size. As soon as any dose produces an effect, however slight, take no more of the drug, and note every disturbance of function, feeling or emotion. Every pain or abnormal sensation or appearance must be clearly defined as to character and exactly located. Note the precise time of the appearance and disappearance of every symptom, and under what circumstances the symptoms are made worse or better. In case any of the symptoms experienced and noted have previously occurred when not under drug influence, mention the fact.

5. At least once each day present yourself to the director of your proving for inspection, and submit your daily record for such explanation of symptoms as may be necessary for a clearer understanding. Explanatory notes and corrections should be made on the margin of the record-sheet. The inspection should embrace every diagnostic test applicable, whether with the ophthalmoscope, laryngoscope, stethoscope, sphygmograph, or other instrument. The quantity of urine voided, the color of urine, its reaction and its constituents, as demonstrated by chemical tests and the microscope, should be noted.

6. After all traces of the effects of the drug have disappeared, and your normal condition has been re-established, begin another proving with the same drug. No reference to the former effects must be made, but an unbiased account given of the symptoms appearing during the re-proving.

7. As soon as each proving is completed, forward the record to

CHARLES MOHR, M.D., PHILADELPHIA.

I did not succeed, however, in getting all the data made sufficiently explicit, more on account of the lack of interest or assistance on the part of preceptors of students. Here I wish to remark that students at college, during the lecture terms, are not under the conditions suitable for making the best provings. The handling of chemical substances in the laboratory, the surroundings of the dissecting-room, etc., often operate to vitiate drug effects, and, besides, the professor of materia medica, with his other numerous duties, cannot devote sufficient time to make all necessary examinations of the meaning of symptoms. The best time for proving, on the part of students, is during the college interregnum, at a time when they can devote more attention to themselves, and be free from the vitiating influences referred to, and when they can have the assistance

of their preceptors, who can explain many things that the student does not fully comprehend, and make physical explorations of organs, presumably affected, with instruments of precision.

Perhaps better than the student as a fit subject for the prover, comes the recent graduate. He has the time, for the demands of practice are yet few, and he has a better knowledge of the requirements of a good drug proving.

Women should not be overlooked. It has always surprised me that so few of the gentler sex can be induced to prove. Our women practitioners should look after this matter.

I believe that after a drug has been pushed on the human subject as far as one dares, at such time as the subjective phenomena indicate a possible beginning lesion of an organ or tissue, then further experiments should be made on the lower animals, to determine what lesions are producible, and whether they explain the subjective symptoms produced on man or woman.

Every one in this Institute should feel the vital necessity of drug experiments thus carried out. Nothing would so distinctly stamp us as scientific investigators, and no one need fear the results to homœopathy as a system of therapeutics, nor fear that any laurels would thereby be plucked from the crown of Hahnemann. To insure the best results, and to enlist the largest possible number of workers, I would earnestly recommend that the members of the Bureaus of Materia Medica and Clinical Medicine, and the Standing Committee on Pharmacy and the Directors of Provings, act in agreement, the bureaus and committees helping each other, while working still in their own special fields of labor. How this harmony of action is to be effected is for the Institute to determine. Perhaps the chairmen of these bureaus and committees could be constituted a joint committee of conference, with power to make such rules as may be required to consummate our desires.

Means should also be devised to form prover's clubs under the direction of the materia medica professors of the colleges, as suggested by Dr. Wright, and every effort should be made to awaken the most intense interest through our journals and in our State and county organizations.

PROVINGS OF ADONIS VERNALIS.

I.

Orville W. Lane, medical student. Height, 5 feet 7½ inches; weight, 168 pounds; complexion, fair; temperament, sanguineo-lymphatic; family history, good; has no inherited nor acquired constitutional defects; before tenth year had chicken-pox, pertussis,

and pneumonia; no illness since, but has slight nasal catarrh; uses no stimulants nor tobacco; drinks no tea nor coffee, the latter inducing indigestion; cannot bear fat meat—it causes nausea; normal pulse, when lying down, A.M., 60; P.M., 52; sitting, A.M., 65; P.M., 58; standing, A.M., 72; P.M., 64; normal respiration, sitting, after continued quiet, 11 per minute.

Prover's Daily Record.

First Day.—Feels perfectly well; temperature in mouth, 98.4°; pulse, lying, 60; sitting, 66; standing, 72; stool and urine normal. At 11.40 A.M. took 10 grains of *Adonis vernalis* crude. At 5 P.M. felt an increase of bowel peristalsis while reading. Temperature, 98.6°; pulse, sitting, 54. At 7 P.M. felt a slight glow of heat over surface of body; abdomen bloated and pass hot flatus repeatedly in small quantity, somewhat offensive; head felt light and some aching in occiput and nape of neck, with slight stiffness; temperature, respiration, and pulse unchanged. At 8 P.M. felt pain in abdomen, just above umbilicus; is cutting in character, not relieved by bending forward; sphincter ani feels a little lax, somewhat as if a purgative had been taken. Later during evening felt some qualmishness at stomach, with belching of gas; head aches from occiput around temples to eye-sockets and across frontal region. At midnight these symptoms continue, and after noting temperature, 98.2°, and pulse, sitting, 60, retire.

Second Day.—Could not go to sleep for full half-an-hour after going to bed, on account of rambling thoughts, and would begin to dream almost as soon as I closed my eyes. (Usually go to sleep immediately.) At 7.15 A.M. awoke with gnawing hunger and feeling of weariness and disinclined to arise; got up at 7.30 A.M., but was obliged to lie down again on account of vertigo with faint sickness at stomach; believe I would have fainted had I remained on my feet. Was able to get up at 7.45 A.M.; took bath and dressed. Head feels heavy and dull in occiput, and scalp feels tight all over; head does not ache; tongue coated dirty yellow; slight pain in abdomen, better from support of hands; temperature, 98°; pulse, lying, 54; sitting, 60; standing, 72; respirations, normal; eyes, yellow; dark circles around eyes. At 9.30 A.M. had a large hard, dark-brown stool, expelled only with considerable exertion of the abdominal muscles. At 12 M. pulse, 60; temperature, 98°. Faint, heavy, gone feeling in epigastrium since two hours after breakfast; better out of doors. Had a heavy dull headache in the forenoon, also relieved in open air. Feel apprehensive, as if something would happen. 10 P.M., I have not had any flatulency to-day. Temperature, 98°; pulse, 50.

Headache all evening; anxiety, proceeding from stomach; noise disturbs me; sense of load at epigastrium, and a sickening sensation from pressure; stiffness whole length of spine, with sore aching from tenth dorsal vertebra downwards to last lumbar and outwards to crest of ileum; anterior half of surface of tongue feels sore, as if scalded; intestines feel as if they might break by bending, and bending forward causes pain across transverse colon, as if due to fixed gas; mouth has a nasty, slimy, bitter taste after lying down for half-an-hour; lame, dull, aching pains in thighs, deep in muscles, better on moving about and out of doors; have had a tired languid feeling, or general malaise, all P.M.; worse at 9 o'clock, and when sitting or standing erect; eyes smart and sensitive to light; have taken meals regularly and of the usual kind, but had no appetite for supper; have been unusually susceptible to cold this evening; had to button overcoat from top to bottom, which I seldom do, being used to a cold climate.

Third Day.—After retiring last night was kept awake about an hour by distressing fulness just below epigastrium, which pressure relieved; when lying upon my side, abdomen felt as if drawn or pushed outwards. After going to sleep slept soundly till 6 A.M., but awoke with a tired aching along my entire spine and about shoulders and hips, and gnawing hunger with heavy weight at stomach, which became better after breakfast. Pulse and temperature normal. At 9.30 A.M., had a hard, brown stool; passed with difficulty, owing to its size. 10 P.M. Have had few symptoms; only a slight dulness of head, and a general sense of languor; appetite not as good as usual, and felt better during exercise out of doors or lying down.

Fourth Day.—Last night went to sleep at once after attending a case of hæmorrhage due to placenta prævia. Awoke this A.M. with the same tired aching of back; breakfast tasted good, yet there was slight feeling of repulsion of food after it entered stomach. 10 P.M. Stomach has felt heavy all day; urine has an oily pellicle; have had some sticking pain at lower angle of right scapula; felt better out of doors.

Fifth Day.—Slept well last night, but awoke this A.M. with the same dulness and tiredness of previous morning, but to a less degree. At 10 A.M. had stool, nearly normal. 10 P.M. Have had stomach symptoms as on former days, but much diminished in degree. Appetite better. Head feels all right. Tongue still coated yellow.

Sixth Day.—Slept well all night and awoke this A.M. feeling quite natural. At 9 A.M. had perfectly normal stool. At breakfast had good appetite, but not yet as keen as before proving. 10 P.M. There was only a slight remnant of the uncomfortable sensation at the

epigastrium during the day. Have had a little greater desire for cold water than usual.

Seventh Day.—No symptoms.

Eighth Day.—No symptoms.

Ninth Day.—After walking about three blocks to breakfast began to have a pressing desire for stool without pain, and after eating was obliged to hurry home to pass a free, thin, fecal stool filled with brownish lumps. At bedtime feel well, having had no symptoms since bowel evacuation.

Tenth Day.—At 8.30 A.M. a repetition of the painless, thin, fecal stool of yesterday.

Eleventh Day.—No symptoms; feel as usual every way.

II.

Geo. W. Pleasanton, medical student. Height, 5 feet 9½ inches; weight, 143 pounds; complexion, dark; had measles and diseases incident to childhood, but is in good health now, without any inherited disease tendency; use coffee habitually and chew tobacco; normal pulse, lying down, 60; sitting, 62; standing, 68; normal respiration, 16.

Prover's Daily Record.

First Day.—At 7 A.M. before breakfast took 10 grains *Adonis vernalis* crude. Toward evening experienced a nervous restlessness.

Second Day.—Passed a restless night disturbed by horrible dreams.

Third Day.—The dreams of last night repeated. No further effects.

PROVINGS OF LILIUM TIGRINUM.

I.

Millson R. Allen, medical student. Height, 6 feet; weight, 165 pounds; complexion, medium dark; temperament, nervous; hereditary tendencies, none; former ailments, small-pox, rheumatism, whooping-cough, measles, mumps, chronic pharyngitis, follicular tonsillitis; use coffee and tobacco moderately; pulse, lying down, 69; sitting, 75; standing, 84; respiration, 16.

Prover's Daily Record.

First Day.—Took 5 grains *Lilium tigrinum* crude. No effects.

II.

Charles W. Benedict, medical student. Height, 5 feet 11½ inches; weight, 160 pounds; temperament, nervo-bilious; complex-

ion, light; hereditary tendencies, none; former ailments, none; use no stimulants nor narcotics; normal pulse, lying down, 55; sitting, 60, standing, 68; normal respiration, 14.

Prover's Daily Record.

First Day.—Took 5 grains *Lilium tigrinum* crude. No effects.

III.

Barton L. Baker, medical student. Height, 5 feet 5 inches; weight, 125 pounds; temperament, nervous; complexion, fair; hereditary tendencies, none; had measles when a child, intermittent fever five years ago; smoke one or two cigars per day, and drink coffee.

Prover's Daily Record.

First Day.—Took 5 grains *Lilium tigrinum* crude, at 8 A.M. In afternoon had some pain in lower bowels due to gas, and relieved by passing offensive flatus.

Second Day.—No symptoms.

Third Day.—At 10.30 A.M. suddenly experience a stitching pain in region of left kidney, worse from deep breathing; pain lasted about an hour. No stool.

Fourth Day.—Pain in left kidney as yesterday, and at same hour. Some collection of flatus causing colicky pain, relieved by passing stinking flatus. No stool.

Fifth Day.—8 A.M. bowels moved slightly; stool hard at first then soft. No pain in kidney to-day. 10.30 P.M. have pain in lower bowels, quite severe for a few moments; felt as if flatus gave rise to it, but could pass none. 11.30 P.M. had a loose stool.

Sixth Day.—8 A.M. bowels moved, stool loose. 9 A.M., bowels moved again, stool loose and giving relief to pain in lower bowels. No further effects.

IV.

T. L. Macdonald, medical student. Height, 6 feet; weight, 160 pounds; temperament, bilious; complexion, dark; subject to nocturnal emissions occurring frequently but controlled by *Sulphur* 200; no hereditary tendencies; use no stimulants or narcotics; wakeful after coffee, fats nauseate, and feel very sensitive to cold weather; normal pulse, lying, 64; sitting, 72; standing, 80; normal respiration, 20.

Prover's Daily Record.

First Day.—Took 5 grains *Lilium tigrinum* crude, at 8.15 A.M. Fifteen minutes after ingestion, felt slight dull ache in forehead, ex-

tending from temple to temple, more marked upon right side. This manifested itself while singing (I mention this as evidence that if ache were not produced by drug, neither was it due to anticipation or imagination) headache continued through the day. About 11 A.M. fancied I felt a slight trembling and weakness, especially in legs, while standing.

Second Day.—Awakened rather early (5 A.M.) with tendency to profuse ideality. About 12 M. headache came on, but I attribute it to fasting.

Third Day.—Repetition to early waking of preceding day, but found upon my tunica alba traces of a seminal emission.

Fourth Day.—Again awakened with experience of yesterday.

Fifth Day.—Awakened early, but after some time, again fell asleep, and on re-awakening found myself in the last throes of an orgasm. No other effects.

V.

Same prover.

Prover's Daily Record.

First Day.—After an interval of three weeks took 10 grains *Lilium tigrinum* crude, at 8.30 A.M., one and a half hours before breakfast. At 11 A.M. heart and pulse were acting with increased force.

Second Day.—Dull headache at 12 M. (was affected thus for several days before taking drug). It was confined to forehead and temples, especially left side; grew worse till about 4.30 P.M., then gradually decreased and was gone by 7 P.M.

Third Day.—Took another 10 grain dose at 12 M., two hours before dinner. No effects.

Fourth Day.—No effects.

Fifth Day.—Took 10 grains at noon, one hour before dinner. No effects.

VI.

W. F. Minard, medical student. Height, 5 feet 4 inches; weight, 128 pounds; temperament, nervous; complexion, dark; no hereditary tendencies; have had measles, scarlet fever, pertussis, varicella, variola, and hay fever; do not use tea, coffee nor tobacco; have great susceptibility to mosquito bites; honey is a poison to me, and cannot bear fat meat; normal pulse, lying down, morning, 76; evening, 66; sitting, morning, 80; evening 70; standing, morning, 90; evening, 92; normal respiration, 15.

Prover's Daily Record.

First Day.—Took 10 grains *Lilium tigrinum* crude, at 11.50 A.M. at which hour pulse was 76 lying, 80 sitting, 90 standing; tem-

perature, 98.6; tongue slightly coated at base; stool and urine normal.

Second Day.—At 10.40 P.M. pulse, lying, 66; sitting, 72; standing, 80; temperature, 97$\frac{1}{5}$. Had a dull indescribable occipital headache, which began before I got up and went away when I ate my supper at 6.30 P.M. It was worse from stooping and for a little while after going up stairs. At different times little aching pains have seemed to locate themselves for a moment in one place, then go off, and after awhile come again in some other part of the body. (Think this all might have been due to a little cold). Since 12 M. have had some backache, in lumbar region, worse while sitting and have urinated oftener than usual since 2.30 P.M.; urine looks natural. Feet cold greater part of day up to 7 o'clock this evening and cold chills would go over me occasionally. The backache is of a dull character.

Third Day.—Slight occipital headache since 10 A.M. lasting until after supper. After 12 M. had backache and from 4 to 5 P.M. centred in lumbar region.

Fourth Day.—Ate breakfast at 7.30 o'clock and for five minutes thereafter felt a distressed sensation in epigastrium. From 4 to 5 P.M. have had headache in occiput, with backache, and a tired-out feeling. 7.10 P.M., aching in lumbar region, and have had now and then, this afternoon, piercing pains in lower part of upper third of femur. At bedtime backache continues.

Fifth Day.—About 1.30 A.M., awoke from sleep with a dull heavy occipital headache and sick stomach. In a short time went to sleep again, but had troublesome dreams in which I was working hard to regain a lost umbrella. Arose at 7.30 A.M. with back part of head feeling too large; felt very tired, but all symptoms passed off after breakfast, and have felt unusually well.

Sixth Day.—No effects.

Seventh Day.—No effects.

VII.

Everett B. Finney, medical student. Height, 5 feet 11 inches; weight, 170 pounds; nervous temperament; sallow complexion; have had ailments usual to childhood; do not use stimulants or narcotics; pulse rate when lying, 72; sitting, 76; standing, 88.

Prover's Daily Record.

First Day.—Took 5 grains *Lilium tigrinum* crude. No effects.

VIII.

Same prover.

Prover's Daily Record.

First Day.—After an interval of one week, took 10 grains of *Lilium tigrinum* crude without effect.

PROVINGS OF CHININUM ARSENICOSUM.

I.

Herbert L. Northrop, æt. 21, medical student. Height, 5 feet 6 inches; weight, 125 pounds; temperament, sanguine; complexion, light; tendency to slight catarrh of left auditory canal and of the nasal mucous membrane, and itching eruptions of skin in various parts; use no stimulants nor narcotics; pulse, lying down, 69; sitting, 70; standing, 72; respirations 16.

Prover's Daily Record.

First Day.—Took 1 grain *Chininum arsenicosum* 1x trit., 2 hours after breakfast.

9.50 A.M. Itching upon the neck and scalp, changing from one place to another when scratched.

10.10 A.M. Itching worse, and felt on back of neck.

10.30 A.M. Itching disappeared.

1.20 P.M. Sharp pain in head, commencing in left frontal region and shooting towards occiput, followed by dull, sore feeling along track of pain. Soreness lasting several minutes. Soon itching commenced again on the head, and under side of left foot.

1.40 P.M. Intense tired feeling in left side, over middle and lower ribs, like "side-ache." This continued 15 or 20 minutes. Pulse, standing, 80.

4.10 P.M. Dull, heavy pain in the left side of head while sitting, relieved by walking. Pulse, slow and irregular. Slight palpitation of the heart in various parts of the body, noticed while sitting.

5.05 P.M. Marked itching along the left side of the neck, relieved by scratching and then appearing in another place.

5.20 P.M. While bathing, itching of almost entire body. When using towel, felt sore spot on posterior part of right arm, over triceps muscle. In about a minute nearly whole region of right triceps was bright red in color, somewhat swollen, and had a burning, tender feeling, like sun-burn.

5.45 P.M. Intense itching in a small spot on outer side of right leg.

8.00 P.M. Dull pain in right lateral half of head.

8.20 P.M. Desire for stool, relieved by passage of much flatus.

10.50 P.M. Itching appeared again; aggravated by warmth of bed, or bed clothes.

Second Day.—10 A.M. Sharp, transitory pain in left leg just below the knee.

2.35 P.M. Dull, long-continuing rheumatic pain in left shoulder joint, aggravated by lying on left side.

8.10 P.M. Pain re-appears in left shoulder joint and lasts a few minutes.

9.30 A.M. Pain and soreness again in left shoulder joint. Soon passes off, leaving the spot tender.

Appetite increased throughout the day. Still there is soreness on right triceps, causing it to burn when touched.

II.

Charles W. Benedict, medical student. Height, 5 feet 11½ inches; weight, 160 pounds; nervo-bilious temperament; light complexioned; no hereditary tendencies; use coffee at breakfast; pulse, lying down, 55; sitting, 60; standing, 68; respirations 14.

Prover's Daily Record.

First Day.—Took 1 grain *Chininum arsenicosum* 1x trit., at 8.50 A.M. on empty stomach. Temperature at time, 98.6. About 10 A.M. felt slight dull pain in left temple, occasionally a shooting pain through right temple, and a little later pains left the temples, and experienced a dull ache in the vertex lasting an hour, and attended with very slight nausea. Bowels inclined to be constipated. Appetite improved; victuals seemed to taste better than usual.

Second Day.—No further effects.

III.

T. L. Macdonald, æt 27, medical student. Height, 6 feet; weight, 160 pounds; bilious temperament; dark complexion; no constitutional tendency to disease; had typhoid fever some years since, and subject to nocturnal emissions; use no stimulants or narcotics; pulse, lying down, 74; sitting, 80; standing, 86; respirations 19; normal temperature, A.M. 98.4, P.M. 98.4; void about three pints of amber-colored urine in 24 hours; void dark-brown usually well-formed stool every morning.

Prover's Daily Record.

First Day.—Took 1 grain *Chininum arsenicosum* 1x trit., before breakfast at 6 A.M. At 8½ A.M. felt a sudden and violent

urging for stool, which was evacuated with a prolonged gush until bowel was thoroughly evacuated. Stool was thin, watery, brown, and painless. At 10.30 A.M. had another stool of same character, except that it was less watery. At 3 P.M. had dull, heavy headache in frontal and occipital regions, continuing till bed-time.

Second Day.—Headache as on preceding day. About 6 P.M. had a peculiar burning ache in lower anterior part of bladder and through urethra.

Third Day.—No symptoms.

Fourth Day.—Took 1 grain *Chininum arsenicosum* 1x trit., no symptoms.

Fifth Day.—Took 1 grain *Chininum arsenicosum* 1x trit., on going to bed.

Sixth Day.—Called up at midnight and could not sleep for three hours after going to bed.

Seventh Day.—Took 1 grain *Chininum arsenicosum* 1x trit., early in the morning. Stool this A.M. was hard, broke in lumps, dropping from anus piece by piece; stool dark. Dull heavy ache in cerebellum, worse from slightest motion.

Eighth Day.—Stool this A.M, but not so hard as preceding day. Dull, stupid feeling in head with some aching; began about noon and lasted till I went to sleep at night.

Ninth Day.—Had four stools to-day; they were soft like diarrhœa. Headache slight in morning.

Tenth Day.—Stool hard to-day.

Eleventh Day.—Took 1 grain *Chininum arsenicosum* 1x trit., in A.M. Slight cerebellar headache during afternoon and evening.

Twelfth Day.—Took 1 grain *Chininum arsenicosum* 1x trit.; was obliged to urinate more frequently than usual; slight dull ache in frontal region and at base of brain. Stool very hard, voided with difficulty; had to strain and at same time bring pressure to bear with fingers over tip of coccyx; stool dropped out in irregular pieces, dark-brown in color. Headache ceased at noon.

Thirteenth Day.—No symptoms.

Fourteenth Day.—Took 1 grain *Chininum arsenicosum* 1x trit. Urinated more than usual, quantity increased.

Fifteenth Day.—Had to arise in the night to evacuate bladder, having had nocturnal emission, probably from distended bladder. Slight headache in morning.

Sixteenth Day.—No symptoms.

IV.

Millson R. Allen, medical student. Height, 6 feet; weight, 165 pounds; nervous temperament; complexion, medium dark; no

hereditary tendencies; had eruptive diseases during childhood, rheumatism, tonsillitis and pharyngitis; use coffee and tobacco in moderation; pulse, lying down, 69, sitting 75, standing 84; respiration 16.

Prover's Daily Record.

First Day.—Took 2 grains *Chininum arsenicosum* 6x trit., at 10.30 A.M. After an hour's nap awoke at 3.40 P.M. with feeling of being extremely tired. Sexual function was disturbed during the nap; had a complete orgasm and yet penis was strongly erect on awaking. During evening had dry mouth and much thirst; drank six glasses of water between 6 and 11 P.M.

Second Day.—During the night sleep was disturbed by another seminal emission. Thirst continues this A.M.; appetite fair. Exhilarated feeling during the forenoon. At 12 M. had severe and peculiar feeling about the heart, as if a hand suddenly grasped it and holding it for a moment let go; this symptom was repeated for a period of about seven minutes.

Third Day.—To-day had a renewal of the heart symptoms. No other effects.

V.

Same prover.

Prover's Daily Record.

First Day.—After an interval of several weeks took 2 drops *Chininum arsenicosum* 6 dilution, in morning. Became exceedingly evil disposed about 1 o'clock. A quiet anger with everybody without cause; did not care to converse with any one, rather finding fault when doing so. Imagined that I was in a fight with several students and portrayed to myself how I would act had two of them jumped on me. This idea has continued all afternoon ending in marked nervousness, hands trembling exceedingly; muscles of arms and legs have twitched now and then. Study more or less interfered with by thinking that I am about to engage in a pugilistic combat. At 3 o'clock, had pains in both left and right chest resembling those of pleurodynia; remained about an hour. Pains were short, lasting only a minute or more; pressure upon chest when pains were present gave sensation of soreness. Pains were dull, aching, as from pressure, felt as if I wanted to lift tight fitting undershirt from chest; also undo vest, which seemed to relieve.

Second Day.—Nervousness still continues, but not so markedly. Mental symptoms have disappeared. Noticed during the morning occasionally that the objects which I might be looking at steadily, seemed as if trembling; this would only last for a second or so. Just

before dinner had a severe pain in the right instep. During the afternoon a feeling of general soreness appeared in the region of left kidney; seems quite deep and worse when sitting very erect. Better when reclining. Memory seems impaired. Have to work harder to remember or retain what I have read.

Third Day.—Urinated at 1.45 o'clock A.M., and only urinated once since and that occurred at 3 P.M.; there has seemed to be no desire to urinate. Urine appeared to be concentrated. General feeling of lightness about head all day. Have felt exhilarated. No further symptoms noticed.

VI.

Everett B. Finney, medical student. Height, 5 feet, 11 inches; weight, 170 pounds; nervous temperament; dark complexion; have had usual children's diseases; use no stimulants or narcotics; pulse, lying down, 72; sitting, 76; standing, 88; respirations 18.

Prover's Daily Record.

First Day.—Took 2 drops *Chininum arsenicosum* 6 dilution, at 12 M. Soon experienced a sense of warmth all over body, with fulness of the head, followed by a slight sickly sensation; throat soon became dry and thirst developed remaining great all day; appetite increased; at 6 P.M., had slight pain in stomach.

Second Day.—Have a white glairy discharge from nose; some cough; slight pain in bowels; thirsty all day; unable to keep mind on studies as usual; temperature and pulse not affected.

Third Day.—Awoke at 7.30 A.M., and arose, and soon had spell of coughing, with free expectoration, and a glairy nasal discharge; pain in bowels after breakfast, relieved by stool. During morning had frequent pain in bowels, getting worse until relieved by a soft, mushy, brown stool. Breathing not satisfactory; want more air than I can take into lungs. Discharge from nose and expectoration from cough continue all day. Had another small stool in afternoon, preceded by colicky pains, the latter made better when sitting. Pulse, respiration and temperature not affected. Difficult to concentrate thoughts; felt unusually tired on going to bed.

Fourth Day.—Dry cough after rising, with little expectoration. Severe stitching pains, as if by needles, in right chest, followed by similar pains in præcordia; worse on inspiration. Asthmatic breathing; seemed as if inspired air was insufficient. Ascending stairs had shortness of breath and palpitation; pulse at time full and bounding; the shortness of breath and accelerated pulse continued on motion, became better when at rest. Occasionally some pain in bowels. Extremities feel weak. Seemed unable to stand mental strain of study.

Fifth Day.—Slept well last night and to-day; have no symptoms to record.

VII.

Same prover.

Prover's Daily Record.

First Day.—After an interval of two months took 1 grain *Chininum arsenicosum* 1x trit., at 5.45 A.M. In afternoon, about 4 o'clock, felt nauseated, and had sinking sensation at stomach.

Second Day.—Took 1 grain *Chininum arsenicosum* 1x trit., at 6.45 A.M. Empty feeling in stomach soon ensued, and rumbling in bowels as from gas; head feels heavy and dull; appetite impaired; slight pains in right leg below the knee; all symptoms relieved in open air. Headache mostly right-sided, but shifting about; sharp pain in lower limbs; feeling in throat as if a piece of mucus required dislodging by hawking, but could not accomplish it.

Third Day.—No appetite; feel weak; sharp pain in left temple at times; dull pains over fore part of head; head feels too full, as if it would burst, better from walking in open air; pulse to-day slower and weak; some dry cough; urine diminished and high-colored.

Fourth Day.—Diarrhœa this A.M.; hardly had time to dress, stool brown, liquid, and contained jelly-like lumps; pain in left iliac region; quite severe when walking. Could eat no breakfast, but took some dinner, and immediately afterward had great urging for stool, which was watery and blackish; some pain in hypogastrium; lack patience, and feel very irritable.

Fifth Day.—No symptoms save slight fulness of head in evening. Appetite improved.

Sixth Day.—No symptoms during the night, awoke feeling well, and took, therefore, 1 grain *Chininum arsenicosum* 1x trit. at 9 A.M. In the afternoon, had hiccough and belching, followed by urging to stool.

Seventh Day.—At noon felt nauseated and mean; head feels badly; some sneezing. In evening felt better, and on retiring took 1 grain *Chininum arsenicosum* 1x trit.

Eighth Day.—Only symptoms were pain of drawing character in teeth of both upper and lower jaw, left side, and dry hollow cough. No further effects.

VIII.

Joseph Rodes, medical student. Height, 5 feet, 10 inches; weight, 135 pounds; nervous temperament; during childhood had mumps, measles and whooping-cough; use coffee and tea, and

smoke occasionally; pulse, lying down, 78; sitting, 84; standing, 94; respiration, 16; normal temperature, A.M., 98; P.M., 97.5; urine and stools voided daily, and of normal quantity and quality.

Prover's Daily Record.

First Day.—Took 1 drop *Chininum arsenicosum* 6th dilution, before breakfast, at 9 A.M., at which hour pulse, lying, was 68, sitting, 72, standing, 82; temperature, 98.6; respiration, 18. During evening, while reading, fell asleep (am accustomed to do this).

Second Day.—Awoke from sleep at 12.30 A.M. with pain at inferior angle of right scapula, worse from movements and deep breathing. Soon fell asleep and awoke again at 8 A.M., with pain still at inferior angle of right scapula. After breakfast, pulse was, lying, 80, sitting, 96, standing, 110; respiration, 16; temperature, 99. During day felt soreness in brachialis anticus muscle of right arm when using it or when pressing it.

Third Day.—Feel well.

IX.

Same prover.

Prover's Daily Record.

First Day.—After an interval of four weeks took *Chininum arsenicosum* 6th dilution, at noon. A few minutes afterwards felt slight nausea while ascending the stairs. 6 P.M. began to feel rawness in pharynx and larynx continuously; worse from talking; associated with hoarseness. Almost constant desire to clear the larynx of some foreign material by "hemming." These symptoms continued until bedtime (1 o'clock A.M.), were different from those ordinarily experienced from cold, and do not know how I could have taken cold.

Second Day.—Awoke at 7 o'clock A.M. Feel mean about the throat; it feels raw and inflamed, especially the pharynx. Hoarseness. Both the hoarseness and rawness worse from talking. Sense of something on the mucous membrane. Examining with a hand-mirror reveals soft palate, half arches and pharynx congested; pharynx covered with patches of whitish mucus, and studded with papules darker red in color than surrounding mucous membrane. After breakfast and starting usual morning duties, throat symptoms became better. About 5 o'clock P.M. more inclination to the hemming, more hoarseness and rawness, both made worse by talking and laughing. Symptoms grew slightly worse, and at 8 P.M had pharynx and larynx examined by the laryngoscope with the following results: *Laryngoscopic examination.*—Tongue thickly coated white

at base. The mucous membrane of pharynx, palate and half arches congested. A number of elevated points on post-pharyngeal wall. Epiglottis has a yellow deposit on its free margin; false vocal bands seem to project prominently and somewhat pointedly; posterior-laryngeal wall looks rough, and contains elevations like those in the pharynx; bloodvessels can be seen on the true vocal bands in greater quantity at their attached margins, blending off to their free margins. 12 o'clock, midnight, symptoms same. Temperature, 99.4.

Third Day.—Arose at 7 o'clock, with a sensation of rawness and dryness in the pharynx. Post-pharyngeal wall covered with irregular patches of whitish mucus and many pimples, elevations or papules. Tongue coated at base and split down the centre. Hoarseness and pain when talking. An irritation in throat like that produced by carbon-monoxide. Slight, infrequent cough during the day, produced by tickling in supra-sternal fossa. Sometimes, no expectoration; at other times, a small amount of clear, transparent mucus. Between 5 and 6 o'clock P.M., an aggravation of the hoarseness, rawness, etc., in the throat, continuing through the evening.

Fourth Day.—Arose this morning, feeling mean about the throat. Pharynx and larynx feel raw and sore. Pharynx covered with patches of whitish mucus and small elevations. Hawked up some mucus which relieved the throat-symptoms somewhat. Cough, brought on by tickling in the supra-sternal fossa. After coughing must "hem" a number of times to clear the larynx of an excoriating mucus, which the cough only loosened, but did not raise. Dull general pain in the apices of the lungs. Stool this morning dryer than usual. About noon headache began over right eye, sharp and tearing < from motion. Two or three times felt a sharp, deep shooting pain through the left parietal bone. As the day advanced the symptoms grew better, except the cough which seemed to persist. Between 5 and 6 o'clock the above symptoms became aggravated.

Fifth Day.—Throat felt better this morning; had some cough which seemed to loosen a lumpy expectoration from the larynx or lower part of the pharynx, but "hawking" and "hemming" was necessary to raise it completely. Expectoration was in solid curds of a slight greenish tinge. Cough is frequently brought on by tickling in supra-sternal fossa. A single cough to each paroxysm. A tendency to throw head back when coughing. Each effort at coughing seems to bring up something, but only to the larynx; from here it must be "hawked" up the remainder of the distance. Slight aggravation of the symptoms in the evening.

Sixth Day.—All throat-symptoms better this morning. Cough, which loosens lumpy mucus, and it is expectorated by a hawking

and hemming. Solid lumps of a light greenish expectorate. Cough quite frequent through day, with inability to raise mucus higher than the larynx without "hawking." Expectoration of the lumps very soon after coughing; during morning there is profuse whitish-yellow expectoration with the cough. During afternoon cough became dryer and dryer. A sore-bruised sensation in the trapezii muscles < from movements of the head and arms, and from touch.

Seventh Day.—Morning, after rising, slight degree of rawness, relieved by clearing the throat of yellowish-green mucus. Infrequent coughing during the day, each cough followed by hemming to bring up a transparent mucus from the larynx. Slight congestion of the half arches and pharynx. No aggravation of any symptoms in the evening.

Eighth Day.—Slight degree of rawness in pharynx, and sensation of something on the pharyngeal wall; relieved by hawking and hemming, until a closely adherent mucous deposit is gotten away. Slight purplish congestion of the half arches and pharynx. No aggravation of any symptoms in the evening.

Ninth Day.—Slight degree of rawness in pharynx, so slight as not to necessitate hawking or hemming; relieved by breakfasting. Slight, purplish congestion of half arches and pharynx.

Tenth Day—Occasional hawking from the post-nasal space of a tough, frothy-white expectorate.

Eleventh Day.—Symptoms all disappeared. Feel well.

X.

Same prover.

Prover's Daily Record.

First Day.—After an interval of ten days, took 1 drop of *Chininum arsenicosum* 6th dilution, at noon. At 12.30 hiccough. Appetite not good for dinner; slight disgust for meat.

Second Day.—Constipation; stool small, hard, light-brown in color, and difficult to expel.

Third Day.—Constipation continues; stool same.

Fourth Day.—Bowels right again, and feel well in every respect.

XI.

George H. Haas, medical student. Height, 5 feet, 10 inches; weight, 165 pounds; temperament, lymphatic; complexion fair; formerly had pertussis, measles and mumps; no hereditary tendencies; use no stimulants; coffee produces pyrosis and wakefulness; pulse, lying, 60; sitting, 64; standing, 68; respiration, 16; temperature, 98.4.

Prover's Daily Record.

First Day.—Took 1 drop *Chininum arsenicosum* 6th dilution, in A.M. No effect.

XII.

Same prover.

Prover's Daily Record.

First Day.—After an interval of twelve days, took 2 teaspoonfuls of a solution of 10 drops of *Chininum arsenicosum* 6th dilution, in 12 teaspoonfuls of water, every two hours, from 9 A.M. until 7 P.M. At 10 P.M. experienced a burning sensation in the stomach, and passed considerable flatus *per ano.*

Second Day.—Awakened at 5.30 A.M., with pain in abdomen below the umbilicus, of a gnawing character which urged me to stool at 5.45 A.M. Stool fecal, with mucus and blood, with considerable tenesmus before and during stool, lasting about half an hour, with a little discharge every now and then. Nausea and empty retching during stool. Pain relieved by stool. Foul taste in mouth. 7 A.M. Same abdominal pain, with urging to stool; pass more mucus and blood; tenesmus before and for some time after stool; no nausea nor retching; pain relieved by stool. 11 A.M. Same abdominal pain, with urging to stool, which was more mucous and bloody; pain relieved by stool; tenesmus before and for some time after stool, with burning at the anus. No nausea nor retching

Third Day.—7 A.M. Slight pain in the abdomen below umbilicus, relieved by a large stool, which was fecal, with little mucus, slightly tinged with blood; no impairment of the appetite all the time, and no alteration in pulse rate and temperature.

Fourth Day.—Stools normal, and no symptoms of any kind.

XIII.

Isaac G. Shallcross, medical student. Height, 5 feet, 6 inches; weight, 155 pounds; temperament, lymphatic; complexion, dark; former diseases; scarlet fever, diphtheria and mumps; no hereditary tendencies; use no stimulants nor tobacco; drink coffee; normal pulse, 80; normal respiration, 20.

Prover's Daily Record.

First Day.—Took 1 drop *Chininum arsenicosum* 30th dilution, at noon. No effect.

PROVINGS OF ZINCUM METALLICUM.

I.

Name, Herbert L. Northrop.
Residence, 831 N. Broad. (P. O. Box 611, Seymour, Conn.)
Married or single, Single. Occupation, Medical student.
Color, White. Sex, Male. Age, 22.
Height, 5 feet 6 inches. Weight, 127 pounds.
Constitution, inherited or acquired, Eight years ago had attack of eczema, probably of inherited origin, as father is suffering constantly.
Temperament, sanguine, nervous or lymphatic, Sanguine.
Idiosyncrasies, mental or physical, Is startled at the sight of a toad appearing suddenly.
Former diseases, Post-nasal catarrh; crackling in ears, mostly in left, upon swallowing and blowing nose.
Use of stimulants, None.
Use of narcotics, None.
Normal pulse, Lying down, 70; Sitting, 74; Standing, 78.
Normal respiration, 13.
Normal temperature, Morning, 97⅘; Evening, 98.
Urine, habitual quantity and character, Between 2½ and 3 pints daily. Perfectly normal.
Stools, habitual condition, Free, daily movement.
Drug, Zincum metallicum 2x tablets of 2 grains each.

Prover's Daily Record.

First Day.—9.05 A.M. took one tablet of drug. 11.15 A.M. dropping of mucus from posterior nares, which had a sweet, sickish taste, like candied calamus root. 4.30 P.M. desire for stool. 6.00 P.M. strong desire for stool; loud rumbling in abdomen; passed nothing but wind; urinated frequently and passed increased quantity of pale-colored urine during afternoon. 10.30 P.M. took one tablet.

Second Day.—No symptoms in the morning. 1.00 P.M. took one tablet. 4.30 P.M. face very hot and red, while sitting; other persons in the same room complained repeatedly of being cold, while I was warm and had to seek cooler air; skin was moist. Pulse, sitting, 92, full and steady. 5.35 P.M. passed urine which was cloudy as it left the urethra during the entire passage, except toward the last. 5.45. P.M. pulse full, beating 92 per minute; temperature, 99⅘. 6.00 P.M. took one tablet. 6.55 P.M. pulse, sitting, 86; throbbing in the head felt with pulse-beat; head still hot and face flushed; neck and head covered with perspiration, especially behind the ears, around the nose and in folds of skin. 9.30 P.M. pulse 68 per minute

and small; temperature 98¼; heat in head has disappeared. 11.15 P.M. suddenly appearing nausea, very severe, with vomiting of thin liquid matter; face pale and cold; nausea lasted three or four minutes, followed soon after by pains in abdomen, colicky, and one or two shooting down into scrotum; testicles feel sore and bruised; pulse feeble, 68 per minute. Had been sitting quietly during the afternoon and evening. Had eaten nothing since dinner at 2 P.M.; this is my habit on Sundays. Quantity of urine passed during the day has been normal.

Third Day.—A.M. slept very poorly, dreamed all night of everything and nothing; feel used up this morning. No symptoms during the day.

Fourth Day.—No symptoms.

Fifth Day.—No symptoms.

Sixth Day.—No symptoms.

Seventh Day—No symptoms.

Eighth Day.—8.30 A.M. took one tablet of drug. 1.00 P.M. took one tablet. 1.30 P.M. eye-balls ache; stitch-like pain in left eye. 5.00 P.M. took one tablet. 9.00 P.M. took one tablet. 9.20 P.M. itching of nose and scalp, relieved by scratching. During latter part of afternoon and during evening throat has felt sore when swallowing; took bath just before dinner. Unusual thirst during the afternoon; strong desire for salt and salty things. Pulse and temperature normal.

Ninth Day.—8.00 A.M. took one tablet. 10.55 A.M. dull, continuous, slightly throbbing pain in left frontal region. Soon after, same kind of pain in right frontal region, not so severe. 11.10 A.M. pulse 90. 11.15 A.M. throbbing pain at root of nose, with sense of great fulness. 11.25 A.M. pain in left frontal region continues, severer. 11.30 A.M. pulse 88, moderately full and even. Hands burn; palms moist. Head feels full and hot. 11.37 A.M. itching under eyes, relieved by scratching. 11.45 A.M. itching behind right ear, relieved by scratching. 11.47 A.M. weight in forehead; feeling of sleepiness and indifference. Twitching of left sterno-cleido-mastoid muscle. 12.00 M. took one tablet. 1.00 P.M. pulse 88, temperature 99⅖, under the tongue before dinner. 3.30 P.M. desire for stool; passed wind; bowels moved for second time to-day. Pulse 84; temperature 99⅗, 1½ hours after dinner. Hands are hot, palms moist. 4.00 P.M. took one tablet. 4.09 P.M. suddenly appearing frontal headache after walking up stairs, finally settling in right frontal region. 5.10 P.M. pulse 88, full. 5 50 P.M. temperature 100, face red and hot; face, neck and palms of hands moist with perspiration. 8.05 P.M. temporary sharp pain in left parietal region.

Tenth Day.—8.10 P.M. dull pain in left chest. 8.15 P.M. dull

pain in right chest. 11.00 P.M. very slight nausea; at 10 P.M. ate some cake. 12.00 M. pulse 92; hand placed upon forehead can feel pulsations. Hands burn; headache in left part of forehead. Considerable thirst during latter part of afternoon and evening. Temperature 98⅘.

Eleventh Day.—During morning a little more thirst than usual. No further symptoms.

II.

Name, Louis D. Lippitt.
Residence, 97 Smith St., Providence, R. I.
Married or single, Single. Occupation, Medical student.
Color, White. Sex, Male. Age, 20.
Height, 5 feet 10½ inches. Weight, 155 pounds.
Constitution, inherited or acquired, Good.
Temperament, sanguine, nervous or lymphatic, Nervous.
Idiosyncrasies, mental or physical, None.
Former diseases, Whooping-cough, measles, chicken-pox.
Use of stimulants, None.
Use of narcotics, None.
Normal pulse, Lying down, 61; Sitting, 63; Standing, 72.
Normal respiration, 18.
Normal temperature, Morning, 97.7; Evening, 98.6.
Urine, habitual quantity and character, Yellow, acid; sp. gr., 10.19; 30 ounces in 24 hours. A small quantity of uric acid crystals deposit themselves several hours after standing occasionally.
Stools, habitual condition, Daily stools.
Drug, Zincum metallicum 2x, 2 grain doses.

Prover's Daily Record.

First Day.—7.00 A.M. took dose. 5.45 P.M. took dose.

Second Day.— 6.15 A.M. took dose. 9.00 A.M. took dose. 1.30 P.M. took dose. 3.30 P.M. took dose.

Third Day.—To-day have a slight headache, coming on at frequent but irregular intervals, generally felt when moving or jarring head. It is a small spot on the left temple, and feels as if pulse was beating against a tender place. It is not at all severe, and is not noticeable if my mind is occupied with something else. Did not feel it after 8 P.M. (Never had a headache of this character before.)

III.

Same prover. After an interval of nine days began with Zincum metallicum 2x trit.

Prover's Daily Record.

First Day.—2.00 A.M. took 4 grains; no effect. 6.15 P.M. took 4 grains; no effect. 9.45 P.M. took 4 grains; no effect.

Second Day.—7.00 A.M. took 4 grains; no effect. 11.15 A.M. took 4 grains; no effect. 3.15 P.M. took 4 grains; no effect. 7.15 P.M. took 4 grains; no effect.

Third Day.—7.15 A.M. took 4 grains; no effect. 3.00 P.M. took 4 grains; no effect. 7.00 P.M. took 4 grains; no effect.

IV.

Name, Alpheus W. Gregg.
Residence, Staunton, Del.
Married or single, Single. Occupation, Medical student.
Color, White. Sex, Male. Age, 22.
Height, 5 feet 8 inches. Weight, 130 pounds.
Constitution, inherited or acquired, Good.
Temperament, sanguine, nervous or lymphatic, Nervous.
Idiosyncrasies, mental or physical, None.
Former diseases, Children's diseases, subject to tonsillitis.
Use of stimulants, None.
Use of narcotics, None.
Normal pulse, Lying down, 74; Sitting, 75; Standing, 77.
Normal respiration, 19.
Normal temperature, Morning, 98; Evening, 98.6.
Urine, habitual quantity and character, Normal.
Stools, habitual condition, Normal.
Drug, Zincum metallicum 3x, doses of 2 grains each.

Prover's Daily Record.

First Day.—6.30 A.M. took powder; no effect. 9.00 P.M. took powder; no effect.

Second Day.—My rest was disturbed last night by dreams. About midnight dreamed I was falling from roof of a house. Two hours later was at a wedding-feast, the parties being masked and in fancy costumes. 7.00 A.M. took powder. 8.00 A.M. a diarrhœic stool, yellowish in color and evacuated with a gush. 4.00 P.M. took powder. 9.00 P.M. took powder.

Third Day.—Passed a comfortable night; slept continuously from 10 P.M. to 6 A.M. 6.45 A.M. took powder; no further effect.

V.

Name, Everett B. Finney.
Residence, 1543 Vine St., Philadelphia.
Married or single, Single. Occupation, Physician.

Color, White. Sex, Male. Age, 21.
Height, 5 feet 11 inches. Weight, 167 pounds.
Constitution, inherited or acquired, Good.
Temperament, sanguine, nervous or lymphatic, Nervous.
Idiosyncrasies, mental or physical, Craving for sweets.
Former diseases, Measles, varicella, mumps, malaria.
Use of stimulants, None.
Use of narcotics, None.
Normal pulse, Lying down, 80; Sitting, 92; Standing, 100. Heart does not act perfectly rhythmical.
Normal respiration, 16.
Normal temperature, Morning, 98.4; Evening, 98.4.
Urine, habitual quantity and character, About 1½ pints daily, amber-colored.
Stools, habitual condition, Moved daily, but have diarrhœic tendency.
Drug, Zincum metallicum 2x trit.

Prover's Daily Record.

First Day.—8.00 P.M.—Took 2 grains of the powder.

Second Day.—7.00 A.M. took 2 grains of the powder. 11.30 A.M. felt slight pain at apex of the heart. 1.45 P.M. had slight griping in bowels, such as precedes diarrhœa. 2.10 P.M. had a gushing stool of thin brown fecal matter, with passage of flatus. Griping pains continued for five minutes after stool. 5.00 P.M. needle-like pain about the great trochanter of femur. 8.00 P.M. dry cough from tickling in larynx. Dull feeling in head. Pain in bowels continues at intervals.

Third Day.—Slept well last night, and arose feeling very little abdominal pain. End of penis itched slightly on waking. 7.00 A.M. took 2 grains. Have had cramp-like pains off and on all day. Once or twice had slight pain at apex of heart. Mind is dull. Stools to-day were loose and brown.

Fourth Day.—Feel well on arising. 7.00 A.M. took 2 grains. 8.00 A.M. felt piercing pain at apex of heart, continuing two or three minutes. 2.30 P.M. feel dull; use wrong words when talking. Feel chilly. 9.00 P.M., chilliness continues. Low-spirited. Went to bed, but could not sleep till after 11.30 P.M.

Fifth Day.—Did not sleep well last night; awoke many times. During this forenoon felt tolerably well, but at 12 M. head began to ache, worse about temples. 1.00 P.M. feel feverish. Cannot concentrate mind on my work. 2.30 P.M. temperature was 99; pulse, while sitting, 92. Dry cough more or less all day. 9.30 P.M. pain about apex of heart.

Sixth Day.—Some cough this morning. About 10 A.M. had ab-

dominal pains. 1.30 P.M. feel feverish. 2.30 P.M. temperature 99; pulse, sitting, 100. Head heavy and intellect dull. Sharp pain in region of heart.

Seventh Day.—Sleep last night was much broken. 10.30 A.M. again felt sharp pain in apex of heart. Cough dry during portions of the day.

Eighth Day.—Feel well to-day after a good night's sleep. 7.15 A.M. took two grains of drug. 12.30 A.M. began to feel badly about head, and mind was dulled.

Ninth Day.—Felt well all day. 7.15 P.M. took two grains of drug.

Tenth Day.—Did not sleep well last night. Dreamed much, mostly of work or study. 11.00 P.M. got up with feeling as if I must urinate, and was lost in my own room. When thoroughly awake found that the desire to pass water was a false alarm.

Eleventh Day.—No further symptoms.

VI.

Same prover. After an interval of one week took Zincum metallicum 2x trituration.

Prover's Daily Record.

First Day.—8.00 P.M. took 4 grains; no effect.

Second Day.—10.00 A.M. took 4 grains. 11.45 A.M. experienced a dull occipital headache; head feels full. 2.00 P.M. took 4 grains; no effect. 7.30 P.M. took 4 grains; no effect.

Third Day.—10.00 A.M. took 4 grains; no effect. 2.30 P.M. took 4 grains; no effect.

VII.

Name, W. C. Seitz.

Residence, Glen Rock, Penn.

Married or single, Single. Occupation, Physician.

Color, White. Sex, Male. Age, 25.

Height, 5 feet 9 inches. Weight, 150 pounds.

Constitution, inherited or acquired, Vigorous.

Temperament, sanguine, nervous or lymphatic, Sanguine.

Idiosyncrasies, mental or physical, None.

Former diseases, Measles and enteric fever. Have now a slight chronic inflammation of naso-pharyngeal space.

Use of stimulants, Occasionally take a little brandy.

Use of narcotics, None.

Normal pulse, Lying down, 62; Sitting, 68; Standing, 84.

Normal respiration, 19.

Normal temperature, Morning, 98.4; Evening, 98.4.

Urine, habitual quantity and character, 25 ounces excreted daily; sp. gr., 1030; a few lithates.

Stools, habitual condition, Passage daily.

Drug, Zincum metallicum 3x trit.

Prover's Daily Record.

First Day.—7.00 A.M. took 2 grains. 11.00 A.M. took 2 grains. 1.00 P.M. have a vague dull pain in lumbar region. 3.00 P.M. took 2 grains. Lumbar pain continues. Urine diminished, and is highly colored. 7.00 P.M. took 2 grains.

Second Day.— The lumbar pains continued all day, were aggravated on lying on back after retiring, relieved by assuming a lateral position and fell asleep. Awaked this A.M. with no trace of symptoms. 8.00 A.M. took 2 grains. 12 M. took 2 grains. The lumbar pain returned and was experienced the entire day. 1.00 P.M. experienced a headache entirely new to me. Was mostly frontal and temporal, of a congestive character. Beating in frontal and temporal regions, made much worse by stooping and on being exposed to the heat of the sun. Urine diminished and nearly blood red.

Third Day.—No other symptoms experienced.

VIII.

Same prover. After an interval of thirteen days took Zincum metallicum 2x trit. in doses of 2 grains each.

Prover's Daily Record.

First Day.—Commenced taking the drug at 7 A.M. and repeated every fourth hour; before dinner I became drowsy, and had to desist reading to keep awake. In the afternoon had a sort of gnawing headache, especially in frontal region, and most marked over the right eye; on stooping this peculiar gnawing and heaviness was converted into a beating headache. The urine I noticed was high in color and somewhat warm to m. m. of urethra as it passed. Retired somewhat later than usual.

Second Day.—Owing to my getting to bed late the previous night, I made up the few hours missed in the morning. I slept well from 1 A.M. to 5 A.M., when I was called, made my toilet and had breakfast, and was around doing a little work until 7 A.M., when I took the second snooze, sleeping until 9.30 A.M., but this sleep was disturbed with a roving dream. I was all over the continent in that time; at Chicago, part of the time helping to settle the Republican ticket. I awakened tired. There is a slight heaviness in the frontal region.

Third Day.—Took 4 powders at intervals of four hours. Great deal of drowsiness after the second powder, with great indisposition to work. After the third powder drowsiness more marked, somewhat stupid, would miss letter while writing; dull, heavy feeling in forehead; some distress in abdomen, a vague empty feeling, with a discharge of flatus; a certain degree of anorexia. Dull pain in lumbar region, markedly aggravated while in the dorsal decubitus. Some languor and muscular soreness. Urine diminished, high colored and a high sp. gr.

Fourth Day.—Took 3 powders at intervals of four hours. General malaise, and marked muscular soreness towards evening. Dull frontal headache, aggravated by stooping or mental work; an inability to fix the attention while writing or reading. The headache most marked over right orbit. Sickening sensation in stomach. I was very drowsy, but that was no doubt due to the very warm and relaxing weather.

IX.

Name, D. M. Landis.
Residence, Lansdale, Pa.
Married or single; Single. Occupation, Medical student.
Color, White. Sex, Male. Age, 24.
Height, 5 feet 6 inches. Weight, 140 pounds.
Constitution, inherited or acquired, Good.
Temperament, sanguine, nervous or lymphatic, Sanguine.
Idiosyncrasies, mental or physical, None.
Former diseases, Whooping-cough, chicken-pox, measles and mumps.
Use of stimulants, None but coffee occasionally.
Use of narcotics, None.
Normal pulse, Lying down, 56; Sitting, 62; Standing, 86.
Normal respiration, 13.
Normal temperature, Not recorded.
Urine, habitual quantity and character, Three pints in twenty-four hours, amber-colored, acid, slight white sediment.
Stools, habitual condition, Daily stool, soft.
Drug, Zincum metallicum 2x trit.

Prover's Daily Record.

First Day.—6.00 A.M. took 2 grains. 6.00 P.M. took 2 grains.
Second Day.—6.00 A.M. took 2 grains. 6.00 P.M. took 2 grains.
Third Day.—6.00 A.M. took 2 grains. 6.00 P.M. took 2 grains.
Sixth Day.—10.15 A.M. took 4 grains. 2.15 P.M. took 4 grains. 7.00 P.M. took 4 grains.
Seventh Day.—8.15 A.M. took 4 grains. 12.15 P.M. took 4 grains.

4.10 P.M. took 4 grains. 8.15 P.M. took 4 grains. Felt drowsy all forenoon, with heaviness of head and dull frontal headache. (Have headache occasionally.) 11.15 P.M.—This evening could not read. Bright light was too intense. Drowsy all evening, and pain in forehead worse. Stuffed feeling in nose. Cannot study.

Eighth Day.—Frontal headache all day, but not as severe as yesterday evening. No further symptoms.

PROVINGS OF ZINCUM JODATUM.

I.

Name, Joseph Rodes.
Residence, 252 N. 20th, Philadelphia.
Married or single; Single. Occupation, Physician.
Color, White. Sex, Male. Age, 24.
Height, 5 feet 11 inches. Weight, 140 pounds.
Constitution, inherited or acquired, Good.
Temperament, sanguine, nervous or lymphatic, Nervous.
Idiosyncrasies, mental or physical, None.
Former diseases, Mumps, measles, whooping-cough.
Use of stimulants, Coffee, tea, beer; smoke tobacco.
Use of narcotics, None.
Normal pulse, Lying down, 74; Sitting, 80; Standing, 96.
Normal respiration, 18.
Normal temperature, Morning, 98.4; Evening, 97.4.
Urine, habitual quantity and character, Nothing unusual.
Stools, habitual condition, Formed stool daily, brown in color.
Drug, Zincum jodatum 3x trit., powders of 2 grains each.

Prover's Daily Record.

First Day.—10 A.M. took 2 grains dry on tongue, followed immediately by slight nausea, lasting one-half hour. (When tested with sac. lac. always experiences slight nausea.)

Second Day.—8 00 A.M. took 2 grains dry on tongue just before breakfast. Slight nausea followed until 9 A.M., when took breakfast. Eating relieved nausea.

Fourth Day.—8 A.M. took 2 grains dry on tongue on empty stomach; caused nausea and sense of weakness at stomach; relieved by eating. 3.00 P.M. took 2 grains dry on tongue, causing slight nausea. Burning in stomach followed shortly, and cramp-like pain in bowels was experienced; soon passed off while walking.

Sixth Day.—12 M. took 2 grains dry on tongue before dinner. Nausea followed, lasting ten minutes, and immediately relieved by eating.

Nineteenth Day.—8.00 A.M. took 2 grains dry on tongue on empty stomach. Nausea as usual, which eating relieved. 11.00 A.M. took 2 grains dry on tongue. Nausea; slight burning and cramp-like pain in stomach, lasting five minutes. 4.00 P.M. took 2 grains dry on tongue, with repetition of symptoms as at 11 A.M. 8.00 P.M. took 2 grains dry on tongue after tea. Slight nausea.

II.

Name, H. E. Kistler.
Residence, 2501 Jefferson St., Philadelphia.
Married or single, Married. Occupation, Physician.
Color, White. Sex, Male. Age, 29.
Height, 5 feet 5 inches. Weight, 153 pounds.
Constitution, inherited or acquired, Scrofulous.
Temperament, sanguine, nervous or lymphatic, Sanguine.
Idiosyncrasies, mental or physical, Nasal mucous membrane very susceptible to irritation from certain weed seeds.
Former diseases, Diseases incident to childhood.
Use of stimulants, Only lager beer at irregular intervals.
Use of narcotics, Tobacco moderately.
Normal pulse, Lying down, 66; Sitting, 66; Standing, 72.
Normal respiration, 16.
Normal temperature, Morning, 98.4; Evening, 99.5.
Urine, habitual quantity and character, Always free, varying in color from watery to dark amber.
Stools, habitual condition, A soft but formed stool every A.M.
Drug, Zincum jodatum 3x trit., powders of five grains each.

Prover's Daily Record.

First Day.—9.00 A.M. took powder. 10.00 A.M., for 10 minutes felt a painful undulation from free border of ribs right side upward to third rib. 12.00 M. took powder; no effect. 3 P.M. took powder; no effect. 6.00 P.M. took powder; no effect; 9.00 P.M. took powder; no effect.

Second Day.—8.00 A.M. took powder; no effect. 11.00 A.M. took powder; no effect. 2.00 P.M. took powder; no effect.

III.

Name, Everett B. Finney.
Residence, 1543 Vine St., Philadelphia.
Married or Single, Single. Occupation, Physician.
Color, White. Sex, Male. Age, 21.
Height, 5 feet 11 inches. Weight, 167 pounds.

Constitution, inherited or acquired, Good.
Temperament, sanguine, nervous or lymphatic, Nervous.
Idiosyncrasies, mental or physical, Craving for sweets.
Former diseases, Measles, varicella, mumps, malaria.
Use of stimulants, None.
Use of narcotics, None.
Normal pulse, Lying down, 80; Sitting, 92; Standing, 100. Heart's action not perfectly rhythmical.
Normal respiration, 16.
Normal temperature, Morning, 98.4; Evening, 98.4.
Urine, habitual quantity and character, About 1½ pints daily, amber-colored.
Stools, habitual condition, Move daily, but have a diarrhœic tendency.
Drug, Zincum jodatum 3x trit.

Prover's Daily Record.

First Day.—9.30 P.M. took 3 grains; no effect.
Second Day.—7.30 A.M. took 3 grains; no effect. 9.30 P.M. took 3 grains; no effect.
Third Day.—8.00 A.M. took 3 grains; no effect. 12.45 P.M. took 3 grains; no effect. 9.30 P.M. took 3 grains; no effect.
Fourth Day.—7.30 A.M. took 3 grains; no effect. 12.00 M. took 3 grains; no effect.

IV.

Name, D. M. Landis.
Residence, Lansdale, Pa.
Married or single, Single. Occupation, Medical student.
Color, White. Sex, Male. Age, 24 years.
Height, 5 feet 6 inches. Weight, 140 pounds.
Constitution, inherited or acquired, Good.
Temperament, sanguine, nervous or lympathic, Sanguine.
Idiosyncrasies, mental or physical, None.
Former diseases, Whooping-cough, chicken-pox, measles and mumps.
Use of stimulants, None but coffee occasionally.
Use of narcotics, None.
Normal pulse, Lying down, 56; Sitting, 62; Standing, 86.
Normal respiration, 13.
Normal temperature, Not recorded.
Urine, habitual quantity and character, 3 pints in twenty-four hours, amber-colored, acid, slight white sediment.
Stools, habitual condition, Daily stool, soft.
Drug, Zincum jodatum 3x trit.

Prover's Daily Record.

First Day.—7.00 A.M. took 3 grains Zincum jodatum, 3x; no effect. 11.00 A.M. took same; no effect. 3.00 P.M. took same; no effect. 7.00 P.M. took same; no effect.

Second Day.—7.00 A.M. took 3 grains Zincum jodatum 3x; no effect. 11.00 A.M. took same; no effect. 3.00 P.M. took same; no effect. 7.00 P.M. took same; no effect. 11.00 P.M. took same; no effect.

Third Day—8.00 A.M. took 3 grains Zincum jodatum 3x; no effect. 12.00 M. took same; no effect. 4.00 P.M. took same; no effect.

Fourth Day.—Took 5 grains at 9 A.M., 1 P.M. and 6 P.M. In the afternoon felt very sleepy with slight headache, continuing till evening. 5 P.M. felt slight pain in left lumbar region lasting a short time.

Fifth Day.—Took 5 grains at 9 A.M., 1 P.M., 5 P.M. and 9 P.M. Symptoms of yesterday recur.

Sixth Day.—Took 5 grains at 9 A.M., 1 P.M. and 6 P.M. At different intervals felt splinter-like pains in the throat. Very sleepy in afternoon with headache continuing till late in the evening.

Seventh Day.—Took 5 grains at 9.25 A.M. and 1.30 P.M. Headache between 8 and 9 A.M. At 3.45 P.M. headache began again and continued rest of the day. At 12.30 P.M. felt cramp-like pain in left thigh, which continued till 3.45 P.M.

Eighth Day.—Pain in the thighs again, felt after rising early, but gradually subsided after 8 A.M.

PROVINGS OF ZINCUM PHOSPHORICUM.

I.

Name, Charles R. Fulmer.
Residence, 1920 N. 11th Street, Phila.
Married or single, Single. Occupation, Medical student.
Color, White. Sex, Male. Age, 20 years.
Height, 5 feet 7 inches. Weight, 125 pounds.
Constitution, inherited or acquired, Good.
Temperament, sanguine, nervous or lympathic, Nervous.
Idiosyncrasies, mental or physical, None.
Former diseases, Most of the diseases of childhood including scarlet fever, and typhoid pneumonia.
Use of stimulants, Coffee and tea, and smoke tobacco.
Use of narcotics, None.
Normal pulse, Lying down, 64; sitting, 68; Standing, 72.
Normal respiration, 17.

Normal temperature, Morning, 98.4; Evening, 98.4.
Urine, habitual quantity and character, Normal.
Stools, habitual condition, Normal.
Drug, Zincum phosphoricum 3x trit. powders of 3 grains each.

Prover's Daily Record.

First Day.—9.30 A.M. took powder. 2.30 P.M. took powder. 6.30 P.M. took powder. 10.30 P.M. took powder.

Second Day.—7.45 A.M. took powder. 9.00 A.M. have slight crampy pains in abdomen and desire to defecate; stool small and hard. 12.00 M. took powder. 12.30 P.M. very dizzy on rising from seat at desk where I had been writing all morning. The crampy pains troubled me some from time to time. 3.30 P.M., crampy pains continue and have constant desire to defecate. Have tried to control feeling, but desire so strong at times that I sought to evacuate bowels. Stools small and hard and passed only with much straining. 5.30 P.M. stitching pain 1½ inch below and 1½ inch to the left of right nipple coming and going at intervals of about a minute; lasted about 20 minutes while walking, ceasing on sitting down. Abdominal pains better from walking. 6.30 P.M., after supper had a return of crampy pain in the abdomen, lasting 10 minutes.

Third Day.—1.00 P.M. the crampy pains in the abdomen that I complained of yesterday returned while at dinner, but only lasted 20 minutes. 1.30 P.M. sudden shooting pain below left scapula lasting two or three seconds. 4.30 P.M. slight stitching around left nipple occurred while walking for 15 or 20 minutes, becoming better when I stopped walking. 5.15 P M. the crampy abdominal pains continue to come and go, but last only a few minutes. Still have a desire to defecate along with these pains, but I must strain a great deal before any fæces pass. 10.00 P.M. a quick and sharp pain felt around left nipple while standing; lasted only a second.

Fourth Day.—8.30 A.M. abdominal pains still come and go. 10.00 A.M. sharp pain in both sides of the head while writing, lasting about five minutes. 10.15 A.M. throbbing around right nipple lasting three minutes, disappeared and returned in about 15 minutes, lasting then only a few seconds. 1.00 P.M. dull pain in region of right nipple. 4.00 P.M. the pain in right nipple has just left; have been writing at desk.

Fifth Day.—About 3 or 4 A.M. had a seminal emission. 10.00 P.M.—Have had no symptoms to-day.

Sixth Day.—Have had no symptoms.

Seventh Day.—Took a powder every 4 hours. No effect.

Eighth Day.—Took a powder every 4 hours. No effect.

Ninth Day.—Took a powder every 4 hours. No effect.

II.

Name, Louis D. Lippitt.
Residence, 97 Smith Street, Providence, Rhode Island.
Married or single, Single. Occupation, Student.
Color, White. Sex, Male. Age, 20, July 27, 1887.
Height, 5 feet 10½ inches. Weight, 155 pounds.
Constitution, inherited or acquired, Good.
Temperament, sanguine, nervous or lympathic, Nervous.
Idiosyncrasies, mental or physical, None.
Former diseases, Whooping-cough, measles, chicken-pox.
Use of stimulants, None.
Use of narcotics, None.
Normal pulse, Lying down, 61; Sitting, 63; Standing, 72.
Normal respiration, 18.
Normal temperature, Morning, 97.7; Evening, 98.6.
Urine, habitual quantity and character, Yellow; acid; sp. gr. 1019. During twenty-four hours, 30 ounces. A small quantity of uric acid crystals deposit themselves several hours after the passage, frequently but *not constantly*.
Stools, habitual condition, Very regular.
Drug, Zincum phosphoricum 3x trit.

Prover's Daily Record.

First Day.—7.05 A.M. took 2 grains. 11.05 A.M took 2 grains. 3.30 P.M. took 2 grains. 7.30 P.M. took 2 grains.

Second Day.—7.30 A.M. took 2 grains; no effect. 11.30 A.M. took 2 grains; no effect. 3.30 P.M. took 2 grains; no effect. 7.30 P.M. took 2 grains; no effect. 8.45 P.M. took 2 grains; no effect.

PROVINGS OF ZINCUM VALERIANICUM.

I.

Name, Everett B. Finney.
Residence, 1543 Vine St., Philadelphia.
Married or single, Single. Occupation, Physician.
Color, White. Sex, Male. Age, 21 years.
Height, 5 feet 11 inches. Weight, 167 pounds.
Constitution, inherited or acquired, Good.
Temperament, sanguine, nervous or lymphatic, Nervous.
Idiosyncrasies, mental or physical, Craving for sweets.
Former diseases, Measles, varicella, mumps, malaria.
Use of stimulants, None.
Use of narcotics, None.

Normal pulse, Lying down, 80; Sitting, 92; Standing, 100.
Normal respiration, 16.
Normal temperature, Morning, 98.4; Evening, 98.4.
Urine, habitual quantity and character, About 1½ pints daily, amber-colored.
Stools, habitual condition, Moved daily, but have a diarrhœic tendency.
Drug, Zincum valerianicum 1x trit.

Prover's Daily Record.

First Day.—7.00 A.M. took 1 grain. 3.00 P.M. took 1 grain. 4.30 P.M. had colicky pains. 5.15 P.M. colic returns. 5.20 P.M. slight pain in left temple. 5.50 P.M. slight pain in left mastoid process. 7.15 P.M. took 1 grain. 11.00 P.M. colicky pain of short duration. For most part of the day had tendency to erections.

Second Day.—6.30 A.M. arose with colicky pains. 7.00 A.M. took 5 grains. 8.15 A.M. had a strong erection. 11.00 A M. took 5 grains. 4.00 P.M. had hard colicky pains followed by brown watery stool, containing fecal lumps with spluttering when passed.

Third Day.—Between 4 and 5 A.M. was awaked by seminal emission, following lascivious dream. After emission had a feeling of weight and constriction in the perineum. 7.30 A.M. took 5 grains. 12.25 P.M. took 5 grains. 2.15 P.M. had a strong erection with dulness of mind and headache. 2.30 P.M. had abdominal pains. 3.00 P.M. took 5 grains. 4.00 P.M. abdominal pains again. 5.40 P.M. discharge of flatus relieved abdominal pains. 7.00 P.M. took 5 grains. 9.00 P.M. took 5 grains. 9.15 P.M. again had abdominal pains. Between 9.15 and 9.50 P.M. have had to sneeze very hard.

Fourth Day.—Last night had lascivious dreams with seminal emissions towards morning. 6.30 A.M. arose with abdominal pains. 7.00 A.M. took 5 grains. 11.00 A.M. took 5 grains. 2.35 P.M. have slight pain over right eye with dull headache. 3.00 P.M. took 5 grains. 4.30 P.M. had drawing pain at umbilicus and sensation of pressure on rectum when standing. 5.00 P.M. suffer from frontal headache with sense of fulness at occiput. 6.00 P.M. took 5 grains. 9.30 P.M. took 5 grains.

Fifth Day.—6.30 A.M. arose with abdominal pain. 7.30 A.M. took 5 grains. 9.50 A.M. belched up a very bitter fluid. 10.00 A.M. took 5 grains. 1.25 P.M. had sensation as if very heavy weight lay on chest. 2.30 P.M. took 5 grains. 7.15 P.M. took 5 grains. 11.25 P.M. took 5 grains.

Sixth Day.—7.35 A.M. took 5 grains. 12.30 P.M. began to experience great fulness of head with difficult thinking. 2.30 P.M. had passage from bowels of fecal matter followed by watery fluid and

associated with pains in the belly. 6.00 P.M. again have crampy pain in abdomen.

Seventh Day.—All day have heavy tired feeling of brain, as after exhaustion from over-study.

Eighth Day.—No symptoms at all. 7.50 P.M. took 5 grains. 10.00 P.M. took 5 grains.

Ninth Day.—7.00 A.M. took 5 grains. 7.30 A.M. bowels moved; stool soft and mushy, dark, but small. 9.00 A.M. ineffectual desire for stool. 11.00 A.M. took 5 grains. 11.30 A.M. felt distressed mentally, mind is all mixed up. 3.00 P.M. took 5 grains. 7.00 P.M. took 5 grains. 7.15 P.M. had neuralgic pain about heart. 8.30 P.M. return of pain about heart. 8.45 P.M. had severe abdominal pains of crampy character. 9.25 P.M. abdominal pains again. 10.00 P.M. pain in left deltoid lasting some minutes.

Tenth Day.—8.00 A.M. took 5 grains. 6.30 P.M. felt quite sick, as one would feel if prostrated by heat.

Eleventh Day.—Rested poorly last night. 8.00 P.M. had cough, which was dry and produced by tickling in the throat. 10.30 P.M. took 5 grains.

Twelfth Day.—Awoke with an empty feeling at pit of stomach. 7.30 A.M. took 5 grains. 3.00 P.M. took 5 grains. 5.00 P.M. had spell of coughing with feeling of fulness of chest, no expectoration. 6.00 P.M. had slight pain in right deltoid, fulness of head, especially at occiput. 7.45 P.M. another spell of dry cough caused by tickling in throat, and associated with full feeling in chest. 9.20 P.M. have frontal headache.

Thirteenth Day.—7.00 A.M. took 5 grains. 8.00 A.M had cramp-like pain about the heart.

Eighteenth Day.—Have had no symptoms since 8.00 A.M. of June 13th. 1.00 P.M. took 5 grains. 6.00 P.M. took 5 grains. 10.00 P.M. took 5 grains.

Nineteenth Day.—7.15 A.M. took 5 grains. 11.00 A.M. took 5 grains. 6 30 P.M. took 5 grains. 9.30 P.M. took 5 grains. To-day have had some abdominal pain, but trifling in character, and perhaps due to drinking much water.

Twentieth Day.—7.30 A.M. took 5 grains. 11.00 A.M. took 5 grains. 3.00 P.M. took 5 grains. 7.00 P.M. took 5 grains.

Twenty-first Day.—7.00 A.M. took 5 grains. 10.15 A.M. took 5 grains.

Twenty-second Day.—Passed a restless night. 4.30 A.M. had rumbling and pain in bowels. 6.30 A.M. had to arise to evacuate bowels; stool was small, brown and mushy and discharged with much wind. Pain in bowels while dressing and after breakfast. No appetite. Tongue coated white. 8.00 A.M. bowels moved again and once each hour until 11.00 A.M., the stools being scant, but discharged with

tenesmus. After 11.00 A.M. pain subsided. 5.00 P.M. had stiffness of muscles of neck and dull headache which lasted all evening. No appetite to-day for any meal.

Twenty-third Day.—Slept tolerably well last night. 8.00 A.M. had some pain in bowels and passage of small stool with trifling tenesmus. 9.00 A.M. had desire for stool but could not pass one. Tongue still coated, but enjoy meals pretty well to-day. 2.00 P.M. feel quite comfortable in every way. No further effects.

II.

Name, James A. George.
Residence, 916 Mt. Vernon St., Camden, N. J.
Married or single, Single. Occupation, Medical student.
Color, White. Sex, Male. Age, 22 years.
Height, 5 feet, 10½ inches. Weight, 145 pounds.
Constitution, inherited or acquired, Good.
Temperament, sanguine, nervous or lymphatic, Nervous.
Idiosyncrasies, mental or physical, None.
Former diseases, Never sick a day in my life.
Use of stimulants, Beer occasionally and use tobacco.
Use of narcotics, None.
Normal pulse, Lying down, 68; Sitting, 76; Standing, 84.
Normal respiration, 16.
Normal temperature, Morning, 99.8; Evening, 98.4.
Urine, habitual quantity and character, A little over a quart per diem, amber-colored. No albumen nor sugar.
Stools, habitual condition, Tendency to constipation.
Drug, Zincum valerianicum 2x doses 5 grains each.

Prover's Daily Record.

First Day.—8.00 A.M. took powder. 12.00 M. took powder. 4.00 P.M. took powder. 8.00 P.M. took powder. Midnight, took powder.

Second Day.—8.00 A.M. took powder. 12.00 M. took powder. 4.00 P.M. took powder. 8.00 P.M. took powder. Midnight, took powder. No symptoms at all.

Dr. Mohr was reappointed upon the Committee to serve for seven years.

On motion of T. Y. Kinne, M.D., it was

Resolved, 1. That the graduates of each class in our colleges be asked to form provers' clubs, under the direction of the Directors of Drug Provings, thus forming a link between the colleges and this

Institute, and thus increasing the interest upon this subject on the part of graduates and alumni.

2. That the Chairmen of the Committees of Pharmacy and Drug Provings, and of the Bureaus of Materia Materia and Clinical Medicine, together with the retiring President of each year, be constituted a permanent committee of conference to formulate a schema and mode for perfecting this work.

3. That homœopathic journals be requested to collect and publish all verifications of the provings of the remedies chosen each year for study.

In consequence of the absence of the Chairman of the Bureau of Sanitary Science, and of the Chairman of the Bureau of Anatomy, Physiology and Pathology, no addresses by these Bureaus were presented.

The Address in Psychological Medicine

Was presented by J. D. Buck, M.D., of Cincinnati, O., Chairman of the Bureau, and was accepted and referred for publication, as follows:

Mr. President and Members of the Institute:

The subject of nervous and mental phenomena may be approached from two directions: first, from the side of the physical structure by way of physics and physiology; and second, from the purely mental, emotional, or strictly psychological side, by way of philosophy. No exact and comprehensive knowledge of man can ever be obtained except by a combination of these two processes. The result obtained by investigation along either of these lines is but one-sided half-knowledge; knowledge derived by investigation along the philosophical line alone, without a knowledge of physical structure and function, is, at best, only speculation, mere guesswork; while investigation which never transcends physics and physiology, which loses sight of rational synthesis, which ignores or taboos the very faculties by which we comprehend anything, viz., the conditions and consensus of consciousness itself, is, at best, empiricism.

Now the basic function in man, that which lies at the very foundation of organic life, and upon which all higher functions and processes depend, is nutrition; not only the existence and integrity of the physical structure, but the entire forces of the body, both in their origin, correlation, conservation, and distribution, as also their expenditure in what we call function, have their root in nutrition, and

directly or indirectly depend upon nutritive changes. In this way, it may very readily be seen that a comprehensive synthesis that takes cognizance of every known fact in physics and physiology, and which may, therefore, justly be termed *the philosophy of life*, is a very different thing from that ignorant and foolish speculation which exists in mid air, without root or foundation, which guesses and garbles, argues and theorizes, turns every crank, as it trims its sails to every breeze, fair or foul; which is dissipated a thousand times by the stern logic of facts, only to renew itself in more fantastic form, the same old folly, masquerading under a new name.

In thus pointing out the natural basis and legitimate province of philosophy as distinguished from mere speculation, and its use in all processes of research, I have an immediate object, as it bears on the subject in hand.

Nutrition is, after all, a very complicated process. Even from a physical standpoint, the physico-chemical changes are hard to comprehend; but to these must be added something more, which we call *vitality*. Physics and chemistry plus life enter into all processes of nutrition; this, however, is a statement so vague as to convey no definite meaning. Hardly a decade has passed since our writers on physiology begun to use the word *metabolism*, and so to comprehend the facts of changes previously regarded as purely physical on the one side, and vague and uncertain on the other.

The assimilation of foods into living tissues is as incomprehensible to-day as it was a century ago, unless we bear in mind certain intermediate changes and structures which become known as logical deductions from groups of facts, the sequence of which is a law of nature, and which enables us at last to grasp and to comprehend the meaning of nutrition. Stated in its simplest form, the following is our deduction: Viewed from the physical and chemico-vital side, nutrition consists in the conversion of foods into simple living substance, relatively homogeneous in form and protean in power. Viewed from the vito-sentient side, nutrition consists in the transformation of this living substance into tissues and organs, with a residuum of power to be dissipated as *function*.

The tissues feed directly on living colloids, and not on dead matter, while the colloids feed upon or are directly derived from the food. Another fact must not be overlooked, viz., the vital energy or colloidal power is continually fortified from the crystalloidal power of saline substances dissolved in the blood, and which saturate the colloids, this correlation of force from the physical to the vital plane constantly taking place.

If, therefore, we consider nutrition the basic fact in physiology, we must consider metabolism the central fact in nutrition. This deduction thus arrived at, stands as a law of vital dynamics. Nutri-

tion is a two-fold process; from food to living colloids, and from living colloids by differentiation into tissue. Now with this whole process of nutrition the nervous mechanism has *per se* nothing to do; it occurs in structures devoid of nervous tissues, but on the other hand, all nerve tissue and all nervous systems depend for both structure and power directly on the nutritive process. When we come to complicated structures and complex organisms, a mutual dependence arises as the result of association and complication.

No tissue or organ, then, can be considered as originating either its own substance or power, but we depend on the nutritive function for both, and the nervous mechanism can at most only distribute or dissipate that which it has received. Having thus arrived at the source of all organic energy, let us see what the office of the nervous mechanism really may be. Of the two systems of nerves, the sympathetic stands in direct relation to all organic functions, but it is most directly related to the digestive and assimilative processes going on in the digestive tract. The sympathetic is here the direct agent for the correlation of chemico-vital into nervous energy, and this nervous energy reaches a higher plane through the ganglia at the roots of the spinal nerves, whereby it reaches the cerebro-spinal system. It is the office of the cerebro-spinal system to make equable distribution of the energy it thus receives, but no part of which it originates, while the tissue of the cerebro-spinal system is directly fortified by nutritive changes within its own area as are all other tissues and organs.

If the great office of the sympathetic system be correlation, the office of the cerebro-spinal is equilibration or coördination of force and energy. It may thus be seen that chemism, metabolism and correlation pertain to the lower group, in the origin of nervous energy and living matter, and that these processes pertain to the digestive tract, the sympathetic and the lymphatic system.

These originate and maintain the life and energy of the body.

We come next to a higher group, of which the cerebro-spinal system is the lowest term. Here again, as in the lower group, nutrition is the basis. The irritability of simple living matter here becomes "reflex-action"; afferent, efferent, and registered impressions with corresponding change of molecular arrangement comprise these physical changes. I have thus briefly epitomized our present knowledge of the problems under consideration, and the sphere and *rationale* of our so-called "tissue-remedies" lies just here and may perhaps thus be better appreciated, for I believe that these potentized remedies are destined to a future use that will dwarf our present achievements into insignificance. But up to the present point we have dealt solely with the physical side of the equation; from hence our point of departure and method of procedure is a matter of the very first importance. Physics, physiology, and the laws governing

the origin and distribution of living energy are wholly inadequate to account for thought, volition and consciousness.

Hitherto we have built from below upwards; now we must proceed from above downward. Hitherto science has been our ally, analysis our method, but science has uttered her last word, it is *Analogy*. Now philosophy must be our guide, its method is synthesis and it must be as exact as our analysis. Hitherto we have dealt with matter and force, now we are to deal with principles and laws.

Our point of departure is *consciousness*, the central fact in vito-metaphysics, as nutrition is the central fact in vito-physics. We do not stop to speculate as to the origin or nature of consciousness, but take it as a fact, with its known relations to all the conditions of organic life. From this fact of consciousness down through the mechanism and functions of the body, our way is already clear, for science has wrested this realm from the icy grasp of superstition and clothed it with intelligence and comprehension, but from this central fact of consciousness inward and upward to the realm of law and order, of ideal forms and creative power, we have triumphs yet to achieve from the unknown, but not unknowable, and that which has hitherto barred our progress is the fact that this realm is still regarded as sacred to superstition and ignorant authority, and that thousands of persons otherwise intelligent believe real progress here impossible. Even the bounds of ocean deeps are transcended when continents are swallowed up in mid-ocean, or when the bed of slime slowly rises into islands and continents, as has often occurred in the physical history of our globe. But no power hath ever yet set bounds and limits to human thought and aspiration, or said to the mind of man "thus far shalt thou go, but no farther," but on the contrary the whole history of man's progress from savagery to civilization proves that his knowledge of nature and power over her forces is practically without limit.

The report of the Bureau of Psychology for the present year I think is unprecedented in the history of the Institute, so many and so good papers have never been presented in any single year, and I can make this statement with the better grace when I add, that this fact is largely due to the efficient work of the Bureau Secretary, who is prevented from being present by illness in his family. The work of the present year will furnish a most excellent basis for future work, dealing as it does with the very foundation of psychology. Psychology is to-day not only the richest field within the grasp, and open to the exploring intellect of the student of human nature, but within this realm lie concealed comprehensive facts that shall dwarf into insignificance our present possessions, but which when comprehended will illuminate every other problem pertinent to the practice of medicine, or the comprehension of the real nature of man. The

signs of the times not only demand this investigation but already indicate its methods and foreshadow its results.

Our Institute to-day numbers among its members, scores of young men of first-rate ability, of thorough education, and of splendid opportunity. Theirs be the task, theirs be the glory of rescuing from ignorance and superstition the higher nature of man, and of giving to the world a true science and a true philosophy of psychology and so render the American Institute of Homœopathy glorious through all time, and beneficent to the latest generation of the human race.

The hour of twelve having arrived, the Institute proceeded to the election of officers to serve for the year 1889. Drs. R. C. Allen, C. Cleveland, Harold Wilson and M. P. Hunt, were appointed tellers. The election resulted as follows:

For President, Selden H. Talcott, M.D., of Middletown, N. Y.

For Vice-President, T. Y. Kinne, M.D., of Paterson, N. J.

For General Secretary, Pemberton Dudley, M.D., of Philadelphia, Pa.

For Provisional Secretary, T. M. Strong, M.D., of Ward's Island, N. Y.

For Treasurer, E. M. Kellogg, M.D., of New York, N. Y.

Board of Censors, Drs. R. B. Rush, T. F. Smith, Millie J. Chapman, W. H. Dickinson, and C. G. Higbee.

A formal invitation was received from the Minnesota State Society, asking the Institute to hold its next annual meeting at Hotel Lafayette, Lake Minnetonka. The invitation was unanimously accepted.

The President then announced the names of the Bureau Chairmen appointed for the year 1889, (see "Officers and Bureaus") after which the Institute adjourned until eight o'clock, P.M.

FOURTH DAY.—AFTERNOON SESSION.

At three o'clock, sectional meetings were simultaneously held by the Bureaus of Psychological Medicine, Sanitary Science, and Anatomy, Physiology and Pathology.

The Sectional Meeting in Sanitary Science

Was held at three o'clock. In the absence of Dr. H. R. Stout, Chairman of the Bureau, T. Y. Kinne, M.D., of Paterson, N. J., presided.

The following papers were presented and discussed:

"Light in its Relation to Disease," by T. Y. Kinne, M.D.

"Influence of Ice and its Impurities in Disease," by H. E. Beebe, M.D.

"Influence of Food in the Development of Disease," by J. W. Dowling, M.D.

(For papers and discussions, see "Report" of the Bureau.)

The Sectional Meeting in Psychological Medicine

Was held in accordance with the published order of business. J. D. Buck, M.D., of Cincinnati, O., presided. The section received the following papers, those by Drs. Boyer, Talcott, Kinney and Bowen, being read in full and discussed, while the remainder were presented by title.

"Nutrition as Affecting the Imagination," by F. W. Boyer, M.D.

"Mental poise and Malnutrition," by E. O. Kinney, M.D.

"Mind-fag and Malnutrition, by J. G. Baldwin, M.D.

"The Relation of Nutrition to Mental Health and Mental Disease," by S. H. Talcott, M.D.

"General Relation of Nutrition to Convulsions," by A. P. Williamson, M.D.

"Nutrition as Related to Mental and Nervous Diseases," by S. Lilienthal, M.D.

"Epilepsy and Nutrition," by W. M. Butler, M.D.

"The Power of Thought in the Production and Cure of Disease," by W. H. Holcombe, M.D.

"The Nervous System of Man as Modified by his Carnivorous Habits," by G. W. Bowen, M.D.

(For papers and discussions, see "Report" of the Bureau.)

The Sectional Meeting in Anatomy, Physiology and Pathology,

D. A. McLachlan, M.D., of Ann Arbor, Mich., presiding, received and discussed the following papers:

"Amyloid Degeneration," by D. A. McLachlan, M.D.

"The Uses of the Frog for the Purposes of Homœopathy," by Walter Y. Cowl, M.D.

"Temperature in Malaria," by W. John Harris, M.D.

(For papers and discussions, see "Report" of the Bureau.)

FOURTH DAY—EVENING SESSION.

The Institute reassembled at 8.20 P.M., President Cowperthwaite in the Chair.

The Board of Censors reported two additional applications for membership.

Dr. Gorham, of Albany, N. Y., Chairman of the Bureau of Clinical Medicine, being absent on account of sickness in his family, Dr. W. C. Goodno, of Philadelphia, Pa., acted in his stead, and announced that no formal address would be presented by the Bureau. The Institute then adjourned, and

THE SECTIONAL MEETING IN CLINICAL MEDICINE AND SPECIAL THERAPEUTICS

Was convened at 8.30 oclock, Dr. W. C. Goodno, of Philadelphia, Pa., presiding. The following papers were presented and discussed:

"Verifications from Clinical Experience, by G. H. Lawton, M.D.

"Locomotor Ataxy—A Clinical Case," by C. W. Butler, M.D.

"Gastralgia, with Complications," by Leonard Pratt, M.D.

"Clinical Cases," by Prosper Bender, M.D.

"Clinical Observations," by A. L. Fisher, M.D.

"Clinical Facts," by D. A. McLachlan, M.D.

"The Treatment of Typhoid Fever," by W. C. Goodno, M.D.

"Observations in the Treatment of Diabetes," by J. M. Schley, M.D.

"A Case of Glosso-Syphilis," by Thomas Skinner, M.D.

(For papers and discussions, see "Report" of the Bureau.)

FIFTH DAY—MORNING SESSION.

FRIDAY, June 29th, 1888.

The Institute was called to order at 9.05 A.M., the President in the Chair.

The Board of Censors presented their final report, and the candidates recommended by them were duly elected to membership. (See "Report of the Board of Censors.")

Dr. J. P. Dake offered an amendment to the By-Laws, providing for the nomination of officers of the Institute by an informal ballot, and without nominating speeches. The amendment was not adopted.

THE REPORT OF THE COMMITTEE ON MEDICAL LEGISLATION

Was presented by its Chairman, J. H. McClelland, M.D., of Pittsburgh, Pa. It includes papers entitled "Medical Legislation in Florida," by H. R. Stout, M.D.; "Medical Legislation in Alabama," by William J. Murrell, M.D., and the formal report of the committee. The Report was accepted and referred for publication, and is here appended.

The committee on Medical Legislation respectfully presents the following summary of facts bearing upon the question of medical education and licensure.

A declaration to the effect that the status of the medical profession in this country is chaotic in the extreme, constitutes an acknowledgment of a fact everywhere recognized and uniformly deplored.

This chaotic condition has come about, and still continues, because the medical colleges have not adopted a uniform system as to the methods of imparting instruction, the duration of medical studies, and the standards of attainment.

Notably within the past decade, decided evidences of improvement have been witnessed on every hand. Many medical colleges which hitherto had not exacted evidences of preparatory educational acquirements on the part of the student, now require certificates from competent authority, showing a knowledge of Latin and of the English branches of learning taught in the common schools. The methods of imparting a practical knowledge of clinical medicine have been improved; the courses of study have been graded; the terms lengthened to twenty and twenty-four weeks; and the time of study extended to three college years.

These evidences of improvement are an encouraging sign of prog-

ress in the right direction, and the fact that they exist shows a desire, on the part of the faculties of the medical colleges, to comply with the expressed wishes of the profession. It is plainly evident, however, to all outside observers, that the faculties alone will not, in any reasonable probability, be able, even if a majority of them are so disposed, to institute and rigorously maintain a uniform standard of qualifications on the part of their students; one that would be considered satisfactory and trustworthy by the profession and the general public.

The public has measurably lost confidence in the work of the colleges, because a part of that work is not well done. Far too many unqualified students are admitted to practice. Far too many medical colleges still adhere to the short term of sixteen weeks; and the faculties of all medical colleges still retain the power to decide as to the character and quality of their own work—the fitness of their own students for practice. The colleges alone sit in judgment, regarding their own standards of attainments, the decision of each faculty in its own college being final, and, as each institution is wholly independent of every other throughout the country, it has come about that there are in fact as many separate standards of excellence, as there are medical colleges.

Even this fact would not, however, of itself, prove incompatible with the success of the present system, were it not for the further fact that pecuniary and other selfish interests are sufficient, measurably at least, to prevent the exercise of an unbiased judgment on the part of the faculties of the several schools.

The medical colleges having failed to a certain extent to meet present requirements, through, in a majority of instances it may justly be said, no fault of their own, it is apparent that a new element must be introduced into the educational system.

A large proportion of the medical colleges are doing their educational work faithfully and well. These are to be commended. Their graduates, as a rule, are as well equipped for the exigencies of practice as is possible. In order, however, to control the lax ones, a uniform system of supervision of all alike is essential.

It will be seen, therefore, that two radical changes are required, viz.: the establishment, as nearly as may be, of a *uniform standard of attainments;* and the organization of criteria, outside and wholly independent of the colleges, by which *the qualifications of students for practice shall be determined.*

The accomplishment of the first of these, viz., the ideal establishment of a uniform standard of attainments, can never be separated from its ideality, until the organization is effected of a single central bureau for the purpose at Washington, much the same as now exists in the departments of the army and navy.

That such a centralization of authority and control, although at

times seriously considered and advocated, would be attended with insurmountable difficulties, will be at once conceded.

Hence, in order to approximate as nearly as possible thereto, it is proposed to establish a single central examining board for each State. And just here the practical difficulties come in. Here the jealousies and conflicting interests of rival schools interpose almost insuperable barriers to any plan hitherto proposed by the dominant school.

The old school, in every instance, has proposed, and is even now proposing, the appointment of boards largely constructed of its own representatives. The claim is put forward by that school that, being in a majority, it is justly entitled to its ratio of representation. It wholly ignores the fact that the examining boards, being administrative, the rights of the minority cannot be fairly protected, except by equality of numerical membership therein.

This question has been several times presented to the homœopathic profession in New York State, and has been considered in all its bearings. The position taken and the argument adduced by the homœopathic profession in that State, are clearly set forth in the following propositions, extracted from a pamphlet issued by the Committee on Medical Legislation, of the New York State Homœopathic Medical Society.

The issue is distinctly raised, that the time has not yet come for a union of educational effort, the antagonism between the two schools being still too great.

In the early part of the session of the legislature of 1887, the old school introduced, for the fourth or fifth time, a bill providing for a single, old-school, State board of medical examiners, composed of nine members, including, for the sake of representation, one homœopathic and one eclectic physician.

The Committee on Medical Legislation, of the Homœopathic Medical Society, at a hearing before the Assembly Committee on Public Health, entered its earnest protest, for the following reasons:

"That the creation of such a board would practically establish a *permanent and powerful medical monopoly* of the licensing franchise, under the immediate control of *one* school of medicine, thereby constituting an exceedingly objectionable form of *class legislation.*

"That the consciousness of the possession of the power thereby vested in the representatives of the dominant school would, whether intended or not, operate as a constant menace upon the less numerous schools; would tend to strengthen the majority, and would prove constantly detrimental to the growth and permanence of the schools represented by the minority.

"That the unequal representation, therein provided for, would be considered a mark of degradation and subserviency, which would stamp the homœopathic minority with a perpetual brand of inferiority.

"That the functions of the examining board, being administrative,

the basis of representation therein, of the different schools, must, of necessity, be equal, like that of the United States Senate, in order that the judicial powers of each school may be no greater than those of the other two. Unequal representation of the different schools in a single examining board, would place *a premium upon favoritism.*

"That no adequate provision is made for checking favoritism on the part of the majority which, sooner or later, would inevitably occur; hence an act of great injustice would be done to the homœopathic school by the establishment of a single board, on the basis proposed by this bill, the plan of secret examinations therein provided being open to many practical objections.

"That homœopathic students, regardless of their wishes or preferences, would be placed completely in the power of what would be practically an old-school examining board.

"That, as homœopathists, we insist that the qualification of homœopathic students shall be determined by a homœopathic examining board.

"That, on account of the antagonism, rivalry and jealousy existing between the different branches of the medical profession, one school ought not, by any means, to be clothed with arbitrary and irresponsible power, such as this bill provides.

"That it will be impolitic and against public welfare to force by law a coalition involving important rival interests, until there are evidences of greater harmony between the two principal schools; and particularly not until the old school acknowledges the applicability of homœopathic principles by adopting them in practice and teaching them in their own medical schools.

"That, in order to establish a sufficiently uniform standard of attainments, a *single* State examining board is no more a necessity in medicine than in law or theology, in both of which an entrance into these professions is gained through several sources, there being no valid objections thereto on the ground of defective thoroughness.

"That the present law, that of 1872, * authorizing the appointment of State boards of medical examiners, by which each school is provided with its own examining boards, thereby enabling it to accomplish its own educational work untrammelled by the presence of hostile members, is fully in accord with the principles of equal representation; and, by its abundant safeguards, † is sufficiently effective to meet the exigencies of public and professional requirements.

"That having originated and perfected this law, and having for fourteen years maintained thereunder, dissociated from unfriendly interference, a recognized official status; and having complied with its

* Proposed and enacted under the auspices of the Homœopathic Medical Society of the State of New York.

† The Board of Regents of the State University is authorized to carry out its provisions.

unsectarian and catholic provisions, satisfactorily to ourselves, and with careful regard for professional and public interests; we see no good reason, under existing relations for forming an alliance by which our school will be in a great measure deprived of the privilege of performing its full share of educational work; on the contrary, our experience establishes the conviction that professional interests and the public welfare will be more effectually protected and promoted by perpetuating its wise, liberal and conservative principles.

"That having secured the appointment of the first State examining board, and having enjoyed its advantages undisturbed these many years, we are warranted in urging our old-school colleagues to lay aside their prejudices against this admirably-arranged, equitable and effective law, and give it a fair and impartial trial for an equal length of time, before putting forth efforts to supplant it by a method, the operations of which would unquestionably prove destructive to their less numerous rivals.

"That in our opinion the only defect in this law is found in the fact that its benign and salutary provisions are voluntary ones; that in order to insure thorough effectiveness, its enforcement must be made *compulsory*, after a certain prescribed date, upon all who wish to enter upon practice in this State.

"That, with this purpose in view, we will join our colleagues of the old school in procuring such amendments thereof as will make the provisions of this law equally binding upon the representatives of the three legally recognized systems of practice; provided such amendments shall not interfere with the appointment of separate examining boards for each school; furthermore, we are free to state that, in our opinion, after long investigation of this subject, and ample practical experience, this change of the law of 1872 constitutes the only needed reform in the matter of establishing suitable tests of medical scholarship.

"That, in conclusion, we actively oppose the formation of a *single* State examining board, on account of the fact that this effort constitutes a part of a widely extended, well arranged and systematic plan, indorsed by the American Medical Association, for practically placing the management of medical affairs, as far as possible throughout the whole country, under the direct control of one school of medical men; that this pernicious system having been already established in several States, notably those of Alabama and Virginia, is now producing effects the most disastrous upon homœopathy, wholly arresting its progress by prohibiting accessions thereto; a most un-American system; one which must be met by the most determined opposition on the part of all who desire to promote entire liberty of opinion and freedom of action among educated medical men.

"Homœopathists do not wish to place themselves in antagonism to medical legislation having for its object the promotion of public in-

terests; hence do not in this instance oppose the old-school bill without, at the same time, providing, in their opinion, a better method, the substitute which they offer being the present law, that of 1872.

"The application of this law has fully demonstrated the wisdom of its framers. It furnishes abundant means by which the several schools are provided with examining boards of their own selection, placed wholly under their own control. Its equitable and conservative provisions may be summarized as follows:

"It is *equal in application;* the representatives of each of the three schools being placed upon the same footing, no preference being shown to one more than another.

"Its operations are open to public inspection; hence it is *a thoroughly effective law.* It provides abundant checks and safeguards, against intentional fraud on the part of the members of any board, by holding their action subject to the approval of the regents, and by placing all the evidences of the qualifications of each applicant on record for public inspection.

"*It is a safe law,* in that it cannot be made instrumental in awakening sectional jealousies, because it is purely democratic in its methods of application and administration.

"It establishes a uniform standard of acquirements outside the ranks of the profession; hence it is *an impartial law.* It leaves each school free to exercise its own prerogatives, untrammelled by the presence or interference of either of the others; at the same time each board is held responsible for its own acts to an impartial, non-sectarian and non-professional court, the board of regents, who are competent to determine and enforce compliance with a uniform and sufficiently rigid standard of acquirements.

"For these reasons homœopathists are disinclined to give up a system which has stood the test of experience without friction, and one embracing within its provisions such correcting forces as will forever render its execution practically effective and equally useful to the whole profession and the public."*

As previously stated, the educational methods and requirements in this country are chaotic; in fact, in a transition state, passing from a low to higher standards; hence it behooves us as homœopathists to see to it that the interests of medical truth as embodied in the principles of our school are duly protected and perpetuated.

As members of the medical profession at large, we are ready to unite with the old school in its efforts to promote a higher and a uniform standard of medical acquirements. We are ready, also, to unite with them in the inauguration of such corrective forces as will ultimately result in a so-called unification of the profession, provided

* On the presentation of the argument, of which the foregoing is a summary, the Committee of the Senate and Assembly promptly reported *adversely* the bill to create a *single* State examining board.

that, at the same time, homœopathic interests can be preserved intact.

The Committee notice, with no little interest, that the system of State examining and licensing boards has already been established in Alabama, Iowa, Minnesota, Mississippi, North Carolina, and Virginia; also that at numerous meetings of old-school State medical societies papers are frequently presented, strongly advocating the appointment of State examining boards; and further, that at the recent meeting of the American Medical Association, a resolution was re-adopted for the third time, urging the speedy appointment of *single* State examining boards in every State and territory throughout the country.

As a portion of the membership of the medical profession, we must consider this question in all its bearings, immediate and remote, and prepare for such intelligent and concerted action as will lead to the enactment of laws equally advantageous to the development of homœopathic interests in those States in which there are few resident homœopathists, as in those having larger numbers thereof.

At no time in the history of homœopathy, in the opinion of your Committee, has a measure been proposed by the old school the trend of which is more surely subversive of homœopathic interests and policy than this.

The Committee feel that without wishing to be considered alarmists, the present relations of the two rival schools, constitute a critical juncture in the history of homœopathy; all the more so because the measures proposed by the old school come to us under the guise of liberality, shrewdly planned so as to cover their real purposes; if carried out, however, they will steadily and effectively work to the ultimate disintegration of the homœopathic school.

The danger to homœopathy arises, not so much from the active opposition of the old-school examiners, as the mere fact of their presence constituting a perpetual menace to the safety and prosperity of our school, through the fear of old-school antagonism, exaggerated often times, no doubt; yet will be found sufficiently potent, if this policy is successfully established, to draw or drive away many hundreds of homœopathic students.

Hence it will be seen, that there is urgent necessity for the exercise, on our part, of wise, prudent and conservative action.

In order to secure uniformity of purpose and harmony of action, the Committee would respectfully request the Committee on Medical Legislation, in the several States, to carry out, as nearly as may be, the following suggestions:

1st. By all means avoid the attitude of real or apparent obstructionists to true medical progress.

2d. Oppose, *to the fullest extent*, and under all conditions, the estab-

lishment of a *single* old-school State examining board, with or without minority homœopathic representation therein.

3d. In all the States in which homœopathists reside in sufficient numbers, instead of the *single* old-school board, have the proposed law amended so as to provide for either separate and independent examining boards for the several schools; or, if considered preferable, a combination board having a full corps of seven or nine homœopathic examiners, and possessing complete and independent jurisdiction over all homœopathic applicants.

4th. In all States in which resident homœopathists are few in number, endeavor to prevent the passage of any bill providing for a *single* examining board, either with or without homœopathic representation, and substitute therefor a carefully prepared registration law, thereby falling back upon the educational qualifications furnished by the medical colleges.

5th. If, however, it is found that laws for the regulation of practice and the registration of practitioners are inoperative; and *if*, at the same time, it is found that a bill is presented or is about to be presented to the State legislature, providing for the appointment of a *single* old-school State board of examiners, under whatever name or form, homœopathic students having no alternative thereunder, than an examination of such a board, then take the aggressive at once, and prepare and urge to completion a bill providing for the establishment of a chair of homœopathic principles and practice in every old-school medical college in the State; and bring to bear upon it every available and suitable influence, social and political, and demand its passage on grounds of public expediency, and a wise and prudent provision for the public welfare.

On these and other very important points the Committee desire a free communication of suggestions and proposed plans, to the end that a uniform system, applicable alike to all the States, may be devised and ultimately adopted.

Meanwhile the Committee solicits reports from the committees on medical legislation of all the State medical societies throughout the country.

The Committee respectfully presents the following resolutions for adoption by the Institute:

WHEREAS, Single State boards of medical examiners have been recently established in several States, the membership of which has been made up wholly or largely of the representatives of one school of medicine, thereby fostering and maintaining sectarianism in medicine in a most obnoxious form; and

WHEREAS, The practical effect of the creation of these sectarian boards is found to be prejudicial to the interests of other schools of medicine, and constitutes an unnecessary and unwarrantable inter-

ference with the free exercise of the widest liberty of thought and action consistent with the public welfare; therefore

Resolved, That whenever legislation shall be attempted in any State, looking to the creation of a *single* State board of medical examiners, homœopathists are hereby urged to oppose such bills to the fullest extent of their influence, unless amended so as to provide for the appointment of homœopathic examining boards, having equal legal rights and privileges with those of other schools of medicine.

Resolved, That while we approve the appointment of State boards of medical examiners as the most suitable method for securing higher and more nearly uniform standards of medical acquirements, we reject the proposition that these desirable ends can be attained *only* through the appointment in each State of a *single* examining board.

Resolved, That while we approve the principle of State examinations, we contend that homœopathic interests can be conserved *only* by the establishment in each State of a separate homœopathic examining board; or that which is its equivalant, viz: the appointment of a full corps of seven or nine homœopathic examiners, whose decision alone shall be final as regards the standing and licensure of all homœopathic and other students making application thereto.

Resolved, That in case it shall be found to be difficult or inexpedient to create and maintain a State homœopathic examining board, homœopathists are hereby urged to rely for the protection of their interests mainly on laws for the regulation of medical practice and the registration of all practitioners.

Resolved, That in States in which laws for the regulation of medical practice have failed to protect homœopathic interests, and persistent efforts are being made for creating a *single*, old-school examining board, homœopathists in such States are urged to secure a board of their own; and failing in that, to insist upon the passage of a law providing for the teaching of homœopathic principles and practice in each of the old-school medical colleges in said States, in order that all medical students educated therein, shall receive at least a theoretical knowledge thereof.

Resolved, That a copy of these resolutions, with such other suggestions as the Committee on Medical Legislation may deem proper, including suitable forms of proposed medical bills, be presented by circular or otherwise to the homœopathic profession at an early day.

Medical Legislation in Florida; by H. R. Stout, M.D., Jacksonville, Fla.

At the last session of the legislature of this State, a bill was introduced for the establishment of a State board of health. The bill provided that the board should consist of five physicians, who, in

addition to their duties as members of the board of health, should also be constituted a board of medical examiners. They should examine, in all branches of medicine and surgery, any physician who desired to practice in the State. The bill provided that physicians, of other than the allopathic school, should exhibit a sufficient knowledge of the materia medica and therapeutics of their own school, these allopathic gentlemen being the judges. Before we were aware of its character, the bill had passed its first reading in the house. A few of us held a hasty consultation, and we decided that we could not permit the bill to become a law in its present form. Dr. Cole, of Palatka, and myself proceeded immediately to Tallahassee, and although the chairman of the committee having the bill in charge was an allopathic physician, and there were several others of the same persuasion in the legislature, yet we succeeded in bringing to bear such a strong opposition, that the chairman very reluctantly accepted an amendment that one member of the board should be a practitioner of the homœopathic school. The bill passed the house, but failed to pass the senate from other causes; consequently, did not become a law.

Medical Legislation in Alabama; by William J. Murrill, M.D., Mobile, Ala.

The question of legislation is a serious one in Alabama, and has stopped all emigration into the State. The law has been in operation some fifteen years. We have only four homœopaths, possibly six, in the State. Two graduates of Pulte's College, natives of Alabama, came to consult me a month since, in relation to locating in the State, but I have not yet heard what they have done. There are good locations all over the State, especially at Selma, Montgomery, Birmingham, Huntsville, Anniston and Tuscaloosa. Dr. Pampinella, a graduate of the New York Homœopathic College, was brought up for trial for practicing without a certificate from the Board of Censors of "The Medical Association of Alabama." He made fight, and entered court with his lawyer, prepared to defend himself up to the Supreme Court, but the "regulars" withdrew their prosecution, and the matter seems dropped for the present. In Lee County an eclectic has his case before the Supreme Court of the State, the "regulars" asking for postponement every time the case comes up. It is expected that The Medical Association of the State of Alabama will urge such changes of the present law, in which they do not feel secure, as will enable them constitutionally to prosecute every case. They are fighting for the *whole field*, for *legislative authority*, for pecuniary appointments in the State, and for the vicious pleasure common to the irrational animal.

I wish it was in my power to do more than I have done to defeat

the action of the old school; but they have all the influence and means to secure from the legislature all they demand, yet, being afraid of us, they seem now more inclined to ask what we want. On this answer we are not agreed. I have opposed boards in every form, and advocated a simple registration law, under oath upon the diploma presented before the probate judge of the county in which the applicant intended to practice medicine. Our legislature sits this winter. Without means to secure and have in attendance upon the Assembly an able advocate to represent us, we shall again fail to protect ourselves and our profession from an odious and insulting law. Gentlemen have most kindly offered their services; Drs. Dake, Eaton, Orme, and others. We shall do what we can, and all we can, and I shall endeavor to have a substitute to the present law, such as I referred to, presented to the legislature. I did so four years ago, but could not get the Judiciary Committee to report upon the bill, such was the strong influence of the large number of old-school physicians against it. My health has not allowed me to be present in Montgomery at the time the subject was up, and might have been pressed. Homœopathy in Alabama is seventy-five per cent. behind any other State. The ignorance of the people and prejudice of the old school render the work and progress of homœopathy very slow.

The recommendation of the Committee, that the Institute pass the resolutions contained in the report, was adopted.

The Memorial Service

in honor of deceased members was then held. Dr. Henry D. Paine, of New York, the necrologist of the Institute, presented memorial notices of the nineteen members who had departed this life during the year past, and his report was followed by brief eulogies, pronounced by several of the members present. For the memorial notices and eulogies, see "Necrological Report."

The following was offered by Dr. Talbot, and adopted:

Resolved, That the Committee on Medical Legislation shall hereafter consist of five members, the term of service of one member expiring each year.

Dr. T. Y. Kinne offered the following, which was adopted:

Resolved, That a committee of five members, including the General Secretary and the Chairman of the Local Committee of Arrange-

ments, shall be appointed to arrange the programme, and expedite the business of the session.

Article II., Section 2, of the By-Laws was, on motion, amended, by striking out the words "arrange the business of the meetings."

The following were also offered:

Resolved, That the time allotted to any standing committee for the presentation of its Report shall not exceed fifteen minutes. Adopted.

Resolved, That no member of a Bureau, who has failed to perform active service thereon, shall be appointed to its chairmanship for the ensuing year. Adopted.

Resolved, That the time allotted to the session of next year be extended to Friday night. Adopted.

Dr. T. Franklin Smith, of New York, gave notice that at the next annual meeting he should move an amendment to the By-Laws, providing for a change in the time of holding the annual election of officers.

Dr. H. C. Allen, of Ann Arbor, Michigan, gave notice that next year he should move an amendment to the By-Laws, requiring applications for membership to include a clause setting forth that the applicant "is a believer in, and a practitioner of homœopathy."

Dr. L. C. Grosvenor, of Chicago, Ill., offered a resolution to change the By-Laws, so that hereafter "no two consecutive sessions of the Institute shall be held within the limits of the same State." After a brief discussion, it was postponed till the next annual session.

Dr. Grosvenor moved that the Secretary be instructed to announce in the annual circular the above proposed change in the By-Laws. Adopted.

Dr. Paine offered a similar motion relative to Dr. Allen's proposed change in the By-Laws. Lost.

A resolution of thanks to the Local Committee of Arrangments, and especially to its Chairman, Dr. A. R. Wright, of Buffalo, N.Y., was adopted by a rising vote.

A resolution of thanks was tendered to the President, Dr. A. C. Cowperthwaite, for the faithful, efficient and courteous manner in which he had presided over the deliberations of the Institute.

A vote of thanks was also tendered to the secretaries and to the reporters of the press.

The President presented the complete list of Bureaus and Committees appointed to serve for the year 1889. (See "Officers, Bureaus and Committees for 1889.")

There being no further business, a motion to adjourn was adopted, and the President, after expressing his sense of gratification in view of the pleasant and successful session, and extending his thanks to the members for the cordial support they had given him, "declared the Forty-fifth Annual Session of the American Institute of Homœopathy adjourned *sine die*."

PEMBERTON DUDLEY, M.D.,
General Secretary.

COMPLETE REPORT OF THE BOARD OF CENSORS.

PHYSICIANS ELECTED TO MEMBERSHIP.

ALDRICH, HENRY C., M.D., ... Minneapolis, Minn.
Hahnemann Medical College of Philadelphia, 1881.

BAILEY, BENJAMIN F., M.D., ... Lincoln, Neb.
Hahnemann Medical College of Philadelphia, 1881.

BALDWIN, ORPHA D., M.D., ... Cleveland, Ohio
Boston University School of Medicine, 1885.

BARBER, OSCAR M., M.D., ... Mystic, Conn.
New York Homœopathic Medical College, 1871.

BARDEN, JOHN M., M.D., ... Mansfield, Pa.
New York Homœopathic Medical College, 1862.

BENNETT, FRANCIS M., M.D., ... Chicopee, Mass.
New York Homœopathic Medical College, 1883.

BOYD, PHILANDER S., M.D., ... Nashville, Tenn.
Medical Department, University of Tennessee, 1888.

CLARK, FRANK M., M.D., ... Salem, Ohio.
Homœopathic Hospital College of Cleveland, 1880.

CLARKE, HENRY L., M.D., ... New Bedford, Mass.
Boston University School of Medicine, 1884.

CLOSSON, JAMES H., M.D., ... Philadelphia, Pa.
Hahnemann Medical College of Philadelphia, 1886.

COOPER, PETER, M.D., ... Wilmington, Del.
Hahnemann Medical College of Philadelphia, 1881.

CORNELL, ALBERT B., M.D., ... Kalamazoo, Mich.
Hahnemann Medical College of Philadelphia, 1869.

CRUMPTON, MARGARET L., M.D., ... Allegheny City, Pa.
New York College and Hospital for Women, 1887.

DEETRICK, JOHN M., M.D., ... Youngstown, Ohio.
Homœopathic Medical College of Missouri, 1875.

DEFENDORF, JOHN J., M.D., ... Williamston, Mich.
Detroit Homœopathic Medical College, 1873.

FINNEY, EVERETT B., M.D., ... Philadelphia, Pa.
Hahnemann Medical College of Philadelphia, 1888.

FOWLER, DE WITT C., M.D., ... Aberdeen, Dakota.
College of Physicians and Surgeons, New York, 1863.

GILBERT, CHARLES B., M.D., ... Washington, D. C.
Hahnemann Medical College of Philadelphia, 1876.

HART, FRANK O., M.D., ... West Unity, Ohio.
Homœopathic Department, University of Michigan, 1884.

HEBERTON, WILLIAM W., M.D., ... South Orange, N. J.
New York Homœopathic Medical College, 1885.

HINMAN, SPENCER D., M.D., ... Sparta, Mich.
New York Homœopathic Medical College, 1877.

HODGE, JOHN W., M.D., ... Niagara Falls, N. Y.
New York Homœopathic Medical College, 1881.

HOLCOMBE, J. RANDOLPH, M.D., ... Philadelphia, Pa.
University of Pennsylvania, 1871.

HORNING, DAVID W., M.D., ... Lake City, Minn.
Chicago Homœopathic Medical College, 1882.

HOUGH, WALTER D., M.D., ... Niagara Falls, N. Y.
New York Homœopathic Medical College, 1881.

HOUGHTON, NEIDHARD H., M.D., ... Boston, Mass.
New York Homœopathic Medical College, 1887.

HOWELL, CONRADE, A., M.D., ... Westerville, Ohio.
Homœopathic College of Cleveland, 1888.

HUMPHREY, FRANK M., M.D., ... Danielsonville, Conn.
Boston University School of Medicine, 1885.

HURD, S. WRIGHT, M.D., ... Lockport, N. Y.
Hahnemann Medical College of Philadelphia, 1880.

KEEGAN, W. A., M.D, ... Rochester, N. Y.
Chicago Homœopathic Medical College, 1888.

KEENEY, J. HARVEY, M.D., ... Oswego, N. Y.
New York Homœopathic Medical College, 1883.

KING, WILLIAM R., M.D., ... Washington, D. C.
Hahnemann Medical College of Philadelphia, 1881.

KNOX, JOSEPH H., M.D., ... Orono, Mo.
Hahnemann Medical College of Philadelphia, 1877.

KROGSTAD, HENRY, M.D., ... St. Paul, Minn.
Homœopathic Department, University of Iowa, 1887.

LEE, JOHN MALLORY, M.D., ... Rochester, N. Y.
University of Michigan, 1878.

LEE, SARAH IDELLA, M.D., ... Rochester, N. Y.
University of Michigan, 1888.

LESEURE, OSCAR, M.D., ... Detroit, Mich.
University of Michigan, 1873.

*MILBANK, WILLIAM E., M.D., ... Albany, N. Y.
Albany Medical College, 1872.

MILLER, ZACHARY T., M.D., ... Pittsburgh, Pa.
Hahnemann Medical College of Philadelphia, 1877.

MINARD, WILL. FRANK, M.D., ... Burlington, Vt.
Hahnemann Medical College of Philadelphia, 1887.

MINTON, HENRY BREWSTER, M.D., ... Brooklyn, N. Y.
New York Homœopathic Medical College, 1887.

NOTTINGHAM, JOHN C., M.D., ... Bay City, Mich.
Bennett Medical College of Chicago, 1873.

PALMER, LYMAN R., M.D., ... Minneapolis, Mich.
Hahnemann Medical College of Chicago, 1880.

PARSONS, EDGAR C., M.D., ... Meadville, Pa.
Hahnemann Medical College of Philadelphia, 1877.

PIKE, LUCY JOHNSON, M.D., ... Lynn, Mass.
Boston University School of Medicine, 1885.

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* Membership to date from 1887.

POWELL, WILLIAM C., M.D., ... Bryn Mawr, Pa.
Hahnemann Medical College of Philadelphia, 1879.
PULFORD, ALFRED, M.D., ... Ansonia, Conn.
Homœopathic Hospital College of Cleveland, 1885.
READING, THOMAS, M.D., ... Pittsburgh, Pa.
Hahnemann Medical College of Philadelphia, 1883.
REEVES, JOSEPH M., M.D, ... Philadelphia, Pa.
Hahnemann Medical College of Philadelphia, 1877.
ROBINSON, WILHELMUS B., M.D., ... Easthampton, Mass.
New York Homœopathic Medical College and Hospital, 1888.
SIMMONS, SILAS S., M.D., ... Susquehanna, Pa.
University of Vermont, 1860.
SIMSON, JOHN R., M.D., ... Tonawanda, N. Y.
Homœopathic Hospital College of Cleveland, 1880.
SLOUGH, WILLIAM C. J., M.D, ... Emaus, Pa.
Hahnemann Medical College of Philadelphia, 1869.
SMITH, ERNEST B., M.D., ... Union City, Pa.
Homœopathic Hospital College of Cleveland, 1882.
SOUTHWICK, GEORGE R., M D., ... Boston, Mass.
Boston University School of Medicine, 1881.
STEWART, THOMAS M., M.D., ... Cincinnati, Ohio.
Pulte Medical College, 1887.
STRUNK, EDWARD P., M.D., ... Brewster, N. Y.
New York Homœopathic Medical College, 1874.
TALBOT, GEORGE H., M.D., ... Newtonville, Mass.
Boston University School of Medicine, 1882.
THAYER, CHARLES EDWARD, M.D., ... Minneapolis, Minn.
Chicago Homœopathic Medical College, 1886.
THOMPSON, CHARLES S. W., M.D., ... Helena, Montana.
Hahnemann Medical College of Philadelphia, 1880.
TROTTER, RICHARD R, M D., ... Yonkers, N. Y.
Boston University School of Medicine, 1877.
TUCKER, GENEVIEVE, M D., ... Northfield, Minn.
Homœopathic Department of Michigan University, 1880.
WALKER, JAMES M., M.D., ... Denver, Col.
Homœopathic College of Physicians and Surgeons, St. Louis, 1871.
WELCH, GEORGE OAKES, M.D., ... Westborough, Mass.
Boston University School of Medicine, 1887.
WHEELER, AMSDEN E., M.D., ... Los Angeles, Cal.
Homœopathic Hospital College of Cleveland, 1880.
WHITING, WALTER B., M.D., ... Malden, Mass.
Philadelphia University of Medicine and Surgery, 1872.
WHITMARSH, HENRY A., M.D., ... Providence, R. I.
New York Homœopathic Medical College, 1879.
WILSON, HAROLD, M.D., ... Detroit, Mich.
Homœopathic Department, University of Michigan, 1886.
WORCESTER, GEORGE W., M.D.. . . . . Newburyport, Mass.
Hahnemann Medical College of Chicago, 1883.

TREASURER'S REPORT.

E. M. KELLOGG, *Treasurer, in account with the American Institute of Homœopathy,* 1887–88.

Dr.

June 24, 1887.	To balance on hand,	$ 506 08
June 20, 1888.	To collections to date,	3475 00
		$3981 08

CYCLOPÆDIA ACCOUNT.

June 24, 1887.	To balance on hand,		$196 32
June 20, 1888.	To subscriptions to date,		108 60
			$304 92
July 19, 1887.	Paid for Part VI.,	$264 14	
Jan. 16, 1888.	" " " VII.,	264 46	
			528 60
	Deficiency charged to Institute,		$223 68

Cr.

By Bill of Committee on Railroad Fares,	$ 26 86
" " Bureau of Organization, etc.	72 80
" Expenses at Saratoga Convention,	44 70
" Bill of Dr. Strong, Stenographer,	229 00
" " Dr. Kraft, Assistant Stenographer,	75 00
" " Dr. Bartlett, " "	75 00
" " Insurance, Printing, Expressage, etc.,	14 55
" " Engrossing Certificates,	40 54
" " " Secretary's Testimonial,	11 79
" Salary of Secretary,	500 00
" Postage "	320 02
" " of Treasurer,	55 85
" Printing Transactions of 1887,	1333 50
" Binding " "	407 50
Total Institute Expenses,	$3207 11
Add Deficiency on Cyclopædia,	223 68
	$3430 70
Balance on hand June 20, 1888,	550 29
	$3981 08

The above account, with the accompanying vouchers, have been examined and found to be correct.

R. LUDLAM,
F. H. ORME,
THEO. Y. KINNE, } *Auditing Committee.*

REGISTER OF MEMBERS AND DELEGATES IN ATTENDANCE.

REPORTED BY THOMAS FRANKLIN SMITH, M.D.

ADAMS, C. B., M.D.,	New Haven, Conn.
ADAMS, GEORGE S., M.D.,	Westborough, Mass.
ALLEN, HENRY C., M.D.,	Ann Arbor, Mich.
ALLEN, LAMSON, M.D.,	Southbridge, Mass.
ALLEN, RICHARD C., M.D.,	Philadelphia, Pa.
ARNDT, H. R., M.D.,	Ann Arbor, Mich.
BACON, CHARLES A., M.D.,	Washington, D. C.
BALDWIN, AARON, M.D.,	Washington, D. C.
BARTLETT, CLARENCE, M.D.,	Philadelphia, Pa.
BEALS, HERBERT, M.D.,	Buffalo, N. Y.
BECKWITH, D. H., M.D.,	Cleveland, Ohio.
BEEBE, HENRY E., M.D.,	Sidney, Ohio.
BENNETT, F. M., M.D.,	Chicopee, Mass.
BENNETT, HOLLIS, K., M.D.,	Fitchburg, Mass.
BIRDSALL, A. HOUGHTON, M.D.,	Brooklyn, N. Y.
BLODGETT, STEPHEN H., M.D.,	Cambridge, Mass.
BOOTHBY, ALONZO P., M.D.,	Boston, Mass.
BOWEN, G. W., M.D.,	Fort Wayne, Ind.
BURROUGHS, AMELIA, M.D.,	Omaha, Neb.
BUCK, J. D., M.D.,	Cincinnati, Ohio.
BULL, LOUIS A., M.D.,	Buffalo, N. Y.
*BURGHER, JOHN C., M.D.,	Pittsburgh, Pa.
BUTLER, CLARENCE WILLARD, M.D.,	Montclair, N. J.
CARVILL, ALPHONSO H., M.D.,	Somerville, Mass.
CHAPMAN, MILLIE J., M.D.,	Pittsburgh, Pa.
CLAPP, J. WILKINSON, M.D.,	Brookline, Mass.
CLARK, BYRON G., M.D.,	New York City.
CLAYPOOL, ALBERT, M.D.,	Toledo, Ohio.
CLEVELAND, CHARLES LUTHER, M.D.	Cleveland, Ohio.
COLGROVE, CHARLES H., M.D.,	Willimantic, Conn.
COMSTOCK, T. G., M.D.,	St. Louis, Mo.
CORNELL, ALBERT B., M.D.,	Kalamazoo, Mich.
COUCH, ASA S., M.D.,	Fredonia, N. Y.
COVERT, M. B., M.D.,	Geneva, N. Y.

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* Senior Members.

COWPERTHWAITE, A. C., M.D.,	Iowa City, Iowa.
CRANK, CHARLES D., M.D.,	Cincinnati, Ohio.
CRAWFORD, ALEXANDER K., M.D.,	Chicago, Ill.
CRUMPTON, MARGARET L., M.D.,	Allegheny, Pa.
CULVER, JANE KENDRICK, M.D.,	Boston, Mass.
CUSHING, ALVIN M., M.D.,	Springfield, Mass.
CUSTIS, J. B. GREGG, M.D.,	Washington, D. C.
DAKE, B. F., M.D.,	Pittsburgh, Pa.
*DAKE, J. P., M.D.,	Nashville, Tenn.
DANFORTH, LOOMIS L., M.D.,	New York City.
DAVIS, JOHN E. L., M.D.,	Nyack, N. Y.
DAYFOOT, HERBERT M., M.D.,	Rochester, N. Y.
DETRICK, JOHN, M.D.,	Youngstown, Ohio.
DILLS, MALCOLM, M.D.,	Carlisle, Ky.
DOWLING, JOHN W., M.D.,	New York City.
DUDLEY, PEMBERTON, M.D.,	Philadelphia, Pa.
EDMUNDSON, W. F., M.D.,	Pittsburgh, Pa.
EDSON, SUSAN A., M.D.,	Washington, D. C.
FISHER, ARTHUR, M D.,	Montreal, Can.
FLOWERS, J. R., M.D.,	Columbus, Ohio.
FOSS, DAVID, M.D.,	Newburyport, Mass.
FRENCH, ALFRED, Jr., M.D.,	Lawrence, Mass.
GEE, WILLIAM S., M.D.,	Chicago, Ill.
GEISSER, EMMA C., M.D.,	Grand Rapids, Mich.
GOODNO, WILLIAM C., M.D.,	Philadelphia, Pa.
GORDON, GEORGE A., M.D.,	Sandusky City, Ohio.
GROSVENOR, LEMUEL C., M.D.,	Chicago, Ill.
HALE, EDWIN M., M.D.,	Chicago, Ill.
HALL, ROBERT, M.D.,	Providence, R. I.
HAND, GEORGE F., M.D.,	Binghamton, N. Y.
HALSEY, FREDERICK W., M.D.,	Boston, Mass.
HANSON, WILLIAM G, M.D.,	Everett, Mass.
HART, FRANK O., M.D.,	West Unity, Ohio.
HASBROUCK, SAYER, M.D.,	Providence, R. I.
*HAWLEY, L. B., M.D.,	Phœnixville, Pa.
HAYCOCK, BURT J., M.D.,	Buffalo, N. Y.
HAYNES, JOHN R., M.D.,	Indianapolis, Ind.
HAYWARD, JOSEPH W., M.D,	Taunton, Mass.
HINMAN, S. D., M D.,	Sparta, Mich.
HOAG, CLITUS S., M.D.,	Bridgeport, Conn.
HODGE, JOHN W., M.D.,	Niagara Falls, N. Y.
HOLCOMBE, J. R., M.D.,	Philadelphia, Pa.
HOLMES, H. P., M.D.,	Sycamore, Ill.
HOUGH, W. D., M.D.,	Niagara Falls, N. Y.
*HOUGHTON, HENRY A., M.D.,	Boston, Mass.
HOWARD, E. M., M.D.,	Camden, N. J.

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HOYT, CHARLES, M.D.,	Chillicothe, Ohio.
HUMPHREY, FRANK M., M.D.,	Danielsonville, Conn.
HUNT, M. P., M.D,	Delaware, Ohio.
HUNTER, HORATIO M., M.D.,	Lowell, Mass.
HUTCHINS, H. S., M.D.,	Batavia, N. Y.
*JAMES, BUSHROD W., M.D.,	Philadelphia, Pa.
JAMES, JOHN E., M.D.,	Philadelphia, Pa.
JEFFERDS, HENRY C., M.D.,	Bangor, Me.
*KELLOGG, EDWIN M., M.D.,	New York City.
KENNEDY, ALONZO L., M.D.,	Boston, Mass.
KENYON, W. B., M.D,	Buffalo, N. Y.
KING, WILLIAM RUFUS, M.D.,	Washington, D. C.
KINNE, E. OLIN, M.D.,	Syracuse, N. Y.
KINNE, THEO. Y., M.D.,	Paterson, N. J.
KISTLER, A. L., M.D.,	Allentown, Pa.
KRAFT, FRANK, M.D.,	Sylvania, Ohio.
LAWTON, C. H., M.D.,	Wilmington, Del.
LEAVITT, SHELDON, M.D.,	Chicago, Ill.
LEE, JOHN M., M.D.,	Rochester, N. Y.
LEE, SARAH S., M.D.,	Rochester, N. Y.
LEWIS, F. PARKE, M.D.,	Buffalo, N. Y.
*LUDLAM, R., M.D.,	Chicago, Ill.
LUKENS, J. PAUL, M.D.,	Wilmington, Del.
MCCLELLAND, J. H., M.D.,	Pittsburgh, Pa.
MCDERMOTT, GEORGE C., M.D.,	Cincinnati, Ohio.
MCLACHLAN, DANIEL A., M.D,	Ann Arbor, Mich.
MELLUS, EDWARD L., M.D.,	Worcester, Mass.
MIDDLETON, CALEB S., M D.,	Philadelphia, Pa.
MILLER, C. C., M.D.,	Detroit, Mich.
MILLER, JOHN, M.D.,	Buffalo, N. Y.
MILLER, ZACHARY T., M.D.,	Pittsburgh, Pa.
MILLIKEN, WILLIAM H., M.D.,	Lynn, Mass.
MOHR, CHARLES M.D.,	Philadelphia, Pa.
MORGAN, JOHN C., M.D.,	Philadelphia, Pa.
MONILL, EDWIN C, M.D.,	Norwalk, Ohio.
NICKELSON, W. H., M.D.,	Adams, N. Y.
NORTON, ARTHUR B., M.D.,	New York City.
NORTON, CLAUDE R., M.D.,	Philadelphia, Pa.
*ORME, F. H, M.D.,	Atlanta, Ga.
PACKARD, HORACE, M.D.,	Boston, Mass.
PACKARD, L. B., M.D.,	South Boston, Mass.
*PAINE, HENRY D., M.D.,	New York City.
*PAINE, HORACE M, M.D.,	Albany, N. Y.
PARDEE, EMILY V. D., M.D.,	South Norwalk, Conn.
PARSONS, E. C., M.D.,	Meadville, Pa.
PARSONS, SCOTT B., M.D.,	St. Louis, Mo.

* Senior Members.

PECK, GEORGE B., M.D.,	Providence, R. I.
PENFIELD, SOPHIA, M.D.,	Danbury, Conn.
PHILLIPS, LESTER A., M.D.,	Boston, Mass.
PORTER, PHILIP, M.D.,	Detroit, Mich.
RAND, JOHN P., M.D.,	Monson, Mass.
REED, ROBERT G., M.D.,	Woonsocket, Mass.
RICHARDS, L. B., M.D.,	Oswego, N. Y.
ROBERTS, GEORGE F., M.D.,	Minneapolis, Minn.
RUNNELS, O. S., M.D.,	Indianapolis, Ind.
RUSH, R. B., M.D.,	Salem, Ohio.
SAWYER, ALFRED I., M.D.,	Monroe, Mich.
SCHNEIDER, N., M.D.,	Cleveland, Ohio.
SHERMAN, LEWIS, M.D.,	Milwaukee, Wis.
SLOCUM, MORTIMER, M.D.,	San Antonio, Tex.
SMITH, ERNEST B., M.D.,	Union City, Pa.
SMITH, J. HEBER, M.D.,	Boston, Mass.
SMITH, SARAH N., M.D.,	New York City.
*SMITH, THOMAS FRANKLIN, M.D.,	New York City.
SNYDER, E. E., M.D.,	Binghamton, N. Y.
SOUTHWICK, GEORGE R., M.D.,	Boston, Mass.
SPOOR, D. E., M.D.,	Medina, N. Y.
STEARNS, GEORGE R., M.D.,	Buffalo, N. Y.
STEWART, THOMAS M., M.D.,	Cincinnati, Ohio.
STREETS, JACOB G., M.D.,	Bridgeton, N. J.
STRONG, THOMAS M., M.D.,	New York City.
STUMPF, DAVID, M.D.,	Buffalo, N. Y.
SWETT, EMILY F., M.D.,	Medina, N. Y.
*TALBOT, I. TINSDALE, M.D.,	Boston, Mass.
TALBOT, MRS. EMILY,	Boston, Mass.
TALCOTT, SELDEN H., M.D.,	Middletown, N. Y.
TERRY, MARSHALL O., M.D.,	Utica, N. Y.
THOMAS, A. R., M.D.,	Philadelphia, Pa.
THOMAS, CHARLES M., M.D.,	Philadelphia, Pa.
THOMPSON, VIRGIL, M.D.,	New York City.
TOBEY, WALTER H., M.D.,	Boston, Mass.
TOWNER, HARRY L., M.D.,	Athens, Pa.
TROTTER, RICHARD R., M.D.,	Yonkers, N. Y.
VAIL, JOHN D., M.D.,	Montrose, Pa.
VAN ARTSDALEN, C., M.D.,	Germantown, Pa.
VAN DENBURG, M. W., M.D.,	Fort Edward, N. Y.
VAN NORMAN, EDGAR V., M.D.,	Springfield, Ohio.
WALKER, CATHARINE, M.D.,	Buffalo, N. Y.
WALKER, JAMES M., M.D.,	Denver, Col.
WALTON, CHARLES E., M.D.,	Hamilton, Ohio.
WARREN, J. K., M.D.,	Worcester, Mass.
WEAVER, CHANDLER, M.D.,	Philadelphia, Pa.

* Senior Members.

WEBSTER, WILLIAM, M.D.,	Dayton, Ohio.
*WESSELHOEFT, CONRAD, M.D.,	Boston, Mass.
*WEST, EDWIN, M.D.,	New York City.
*WHITE, THEODORE C, M.D.,	Rochester, N. Y.
WHITING, WALTER B., M.D.,	Malden, Mass.
WHITMARSH, HENRY A., M.D.,	Providence, R. I.
WHITTIER, DANIEL B., M.D.,	Fitchburg, Mass.
WILCOX, DEWITT G., M.D.,	Buffalo, N. Y.
WILBERTON, L. G., M.D.,	Winona, Minn.
*WILDER, LOUIS DE V., M.D.,	New York City.
WILKINS, GEORGE H., M.D.,	Palmer, Mass.
WILLARD, L. H., M.D.,	Allegheny, Pa.
WILSON, HAROLD, M.D.,	Detroit, Mich.
WOLCOTT, EDWIN H., M.D.,	Rochester, N. Y.
*WOOD, J. B., M.D.,	West Chester, Pa.
WOOD, JAMES C., M.D.,	Ann Arbor, Mich.
WOODS, MARY A. B., M.D.,	Erie, Pa.
WRIGHT, A. R., M.D.,	Buffalo, N. Y.

* Senior Members.

VISITORS IN ATTENDANCE.

Adams, Miss Alice A.,	Leominster, Mass.
Adams, Burdett S.,	New Haven, Conn.
Allen Frank L.,	Ann Arbor, Mich.
Allen, Mrs. H. C.,	Ann Arbor, Mich.
Allen, Miss Marian,	Ann Arbor, Mich.
Allen, John S.,	New York City.
Anderson, Alice G. H., M.D.,	Seneca, Kan.
Armstrong, A. G.,	New York City.
Bacon, Mrs. Charles A.,	Washington, D. C.
Baldwin, H. D., M.D.,	Montrose, Pa.
Baldwin, Mrs. H. D.,	Montrose, Pa
Baker, Edward,	Boston, Mass.
Baker, Walter,	Boston, Mass.
Baker, Mrs. W. E.,	Boston, Mass.
Beebe, Miss Lizzie,	South Norwalk, Conn.
Bennett, F. M.,	Chicopee, Mass.
Bennett, Mrs. F. M.,	Chicopee, Mass.
Birdsall, Mrs. A. H.,	Brooklyn, N. Y.
Birdsall, Claude H.,	Brooklyn, N. Y.
Birdsall, Ralph,	Brooklyn, N. Y.
Blodgett, Mrs. S. H.,	Cambridge, Mass.
Boothby, Mrs. Alonzo,	Boston, Mass.
Boothby, Walter M.,	Boston, Mass.
Boynton, C. A.,	Boston, Mass.
Buck, Champlin F., M.D.,	Buffalo, N. Y.
Burns, Walter S.,	St. Louis, Mo.
Butler, Mrs. C. W.,	Montclair, N. J.
Carvill, Mrs. A. H.,	Sommerville, Mass.
Chamberlain, Miss Louisa M.,	Cambridge, Mass.
Clark, Mrs. Byron G.,	New York City.
Clark, Miss Grace,	New York City.
Clement, Francis M.,	Albany, N. Y.
Cox, John W.,	Boston, Mass.
Chatterton, A. L.,	New York City.
Chatterton, Mrs. A. L.,	New York City.
Cowperthwaite, Mrs. A. C.,	Iowa City, Iowa.
Covert, Mrs. N. B.,	Geneva, N. Y.
Crumbie, J. Fred.,	New York City.
Crumpton, Miss Nataline,	Allegheny, Pa.
Custis, Miss Catharine,	Washington, D. C

CUSTIS, HORACE,	Washington, D. C.
CUSTIS, J. B. G., JR.,	Washington, D. C.
CUSTIS, MRS. J. B. G.,	Washington, D. C.
DAGGETT, B. B.,	Buffalo, N. Y.
DAKE, MRS. B. F.,	Pittsburgh, Pa.
DANFORTH, MRS. L. L.,	New York City.
DAYFOOT, MRS. HERBERT,	Rochester, N. Y.
DAYFOOT MISS MATTIE,	Rochester, N. Y,
DEETRICK, MRS. JOHN,	Youngstown, O.
DIBBLEE, H. E.,	New York City.
DOWLING, MISS JEANNIE,	New York City.
DRAEM, GEORGE S.,	Philadelphia, Pa.
EDMUNDSON, MRS. W. F.,	Pittsburgh, Pa.
EDMUNDSON, W. B.,	Pittsburgh, Pa.
EISNER, MORITZ,	New York City.
FAIRBANKS, MISS CHARLOTTE W.,	Boston, Mass.
FORD, H. L.,	New York City.
FOSS, MRS. DAVID,	Newburyport, Mass.
FOWLER, DE WITT C.,	Aberdeen, Dak.
FRASER, MISS IRENE,	Fredonia, N. Y.
FRENCH, MRS. A. J.,	Lawrence, Mass.
FROST, JOHN,	St. Louis, Mo.
FRYER, WINSOR F.,	Middleboro, Mass.
FRYER, MRS. W. F.,	Middleboro, Mass.
GARNSEY, W. S.,	Gloversville, N. Y.
GARNSEY, MRS. W. S.,	Gloversville, N. Y.
GARNSEY, W. S., JR.,	Gloversville, N. Y.
GEE, MRS. WILLIAM S.,	Chicago, Ill.
GOODWIN, FRANK,	Louisville, Ky.
GURNEY, R. F., M.D.,	New York City.
HALLATT, GEORGE D.,	Bridgeport, Conn.
HAMILTON, A. G.,	New York City.
HAWLEY, MISS MARY C.,	Phœnixville, Pa.
HERRICK, MISS MARY W.,	Paterson, N. J.
HOAG, MRS. CLITUS S.,	Bridgeport, Conn.
HOLLETT, B. B.,	Watkins, N. Y.
HOLLETT, MRS. B. B.,	Watkins, N. Y.
HORLICK, JAMES,	Racine, Wis.
HOYT, MRS. CHARLES,	Chillicothe, O.
HOWARD, MRS. E. M.,	Camden, N. J.
HURLBURT, ALBERT T.,	New York City.
JAMES, MRS. JOHN E.,	Philadelphia, Pa.
JAMES, MISS NELLIE A.,	Philadelphia, Pa.
KAVANAUGH, GEORGE B.,	New York City.
KING, J. W., M.D.,	New York City.
KINGSLEY, MRS. E. H.,	Gloversville, N. Y.
KINNE, MISS AMELIA MAY,	Paterson, N. J.
KINNE, MISS ELLA LOUISE,	Paterson, N. J.

LENTZ, WILLIAM,	Philadelphia, Pa.
LEWIS, MRS F. PARK,	Buffalo, N. Y.
LOWE, E. D.,	Boston, Mass.
LUKENS, MRS. J. PAUL,	Wilmington, Del.
LUKENS, MISS HELEN N.,	Wilmington, Del.
MANWARING, M. B.,	Bayonne, N. J.
MCCLURE, MRS. F. A.,	Worcester, Mass.
MILLER, MRS. ZACHARY T.,	Pittsburgh, Pa.
MOHR, MRS. CHARLES,	Philadelphia, Pa.
MURDOCK, MRS. A. L.,	Boston, Mass.
NICKELSON, MRS. W. H.,	Adams, N. Y.
NORTON, MISS MAGGIE,	South Norwalk, Conn.
PACKARD, MRS. HORACE,	Boston, Mass.
PALMER, LYMAN R.,	Minneapolis, Minn.
PARDEE, MISS MARY F.,	South Norwalk, Conn.
PARSONS, MRS. E. C.,	Meadville, Pa.
PARSONS, MISS EVA,	Meadville, Pa.
PARSONS, PAGE,	Meadville, Pa.
PARTRIDGE, BARTON S.,	East Bloomfield, N. Y.
PHELPS, WILLIAM,	New York City.
PHILLIPS, MRS. LESTER A.,	Boston, Mass.
PILLING, S. O.,	Danielsonville, Conn.
POND, EDWARD H.,	Meadville, Pa.
POND, MRS. E. H.,	Meadville, Pa.
POWERS, MISS BESSIE,	Hamilton, O.
PRISH, WILLIAM J.,	Wilson, N. Y.
PROCTOR, W. H.,	Binghamton, N. Y.
PUGH, S. K.,	Brooklyn, N. Y.
REED, MRS. ROBERT G.,	Woonsocket, R. I.
RUGGLES, WILLARD O.,	Boston, Mass.
RUGGLES, MRS. W. O.,	Boston, Mass.
RUSDLETT, H. A.,	New York City.
SAWYER, ALFRED I., Jr.,	Monroe, Mich.
SCHULTZ, AMOS M.,	Philadelphia, Pa.
SMITH, MISS BERTHA,	New York City.
SMITH, CONRAD,	Boston, Mass.
SMITH, MISS LOUISE,	South Norwalk, Conn.
SNYDER, MRS. E. E.,	Binghamton, N. Y.
SOUTHWICK, MRS. GEORGE R.,	Boston, Mass.
STREETS, MRS. JACOB G.,	Bridgeton, N. J.
STRONG, MRS. THOMAS M.,	New York City.
THAYER, MRS. S. P.,	Minneapolis, Minn.
TOBEY, G. G.,	Boston, Mass.
TOBEY, MRS. G. G.,	Boston, Mass.
TOUSLEY, ROBERT F.,	Rome, N. Y.
TOWNER, MRS. H. L.,	Athens, Pa.
TROTTER, MRS. RICHARD R.,	Yonkers, N. Y.
WALKER, MRS. JAMES M.,	Denver, Col.

WALKER, FREDERICK,	Denver, Col.
WESSELHOEFT, MRS. C.,	Boston, Mass.
WATSON, WILLIAM H.,	New York City.
WHITTIER, MRS. D. B.,	Fitchburg, Mass.
WHITTLESEY, MISS LILLIE,	Grand Rapids, Mich.
WILCOX, MRS. DEWITT C.,	Buffalo, N. Y.
WILLSANDT, EMIL,	Cleveland, Ohio.
WOLCOTT, MRS. EDWIN H.,	Rochester, N. Y.
WOOD, MISS BESSIE R.,	West Chester, Pa.
WRIGHT, MRS. A. R.,	Buffalo, N. Y.
WYETH, MISS HATTIE C.,	Cambridge, Mass.
ZWETSCH, J. D.,	Gowanda, N. Y.

There were in attendance 190 Members and Delegates from the different States, as follows, viz.:

Canada,	1
Colorado,	1
Connecticut,	6
Delaware,	2
District of Columbia,	5
Georgia,	1
Illinois,	7
Indiana,	3
Iowa,	1
Kentucky,	1
Maine,	1
Massachusetts,	35
Michigan,	11
Minnesota,	2
Missouri,	2
Nebraska,	1
New Jersey,	4
New York,	47
Ohio,	21
Pennsylvania,	31
Rhode Island,	4
Tennessee,	1
Texas,	1
Wisconsin,	1

There were 148 visitors in attendance, making a total of 338 names that were registered as being present.

Report of the Necrologist,

HENRY D. PAINE, M.D.,

AND

Memorial Service

IN HONOR OF

Deceased Members:

WALTER WARD, M.D.
CORNELIUS ORMES, M.D.
WILLARD P. GAMBELL, M.D.
CHARLES H. WALKER, M.D.
CHARLES SUMNER, M.D.
TITUS L. BROWN, M.D.
HORACE E. BOARDMAN, M.D.
EPHRAIM W. SOUTH, M.D.
ELAM C. KNIGHT, M.D.
ADOLPH LIPPE, M.D.
LORENZO M. KENYON, M.D.
HENRY B. CLARKE, M.D.
WM. H. RANDEL, M.D.
NATHANIEL R. SEELEY, M.D.
ARTHUR P. HOLLETT, M.D.
S. HOPKINS KEEP, M.D.
ARTHUR A. CAMP, M.D.
WM. M. ZERNS, M.D.
JASON W. DRAKE, M.D.

Memorial Service.

WALTER WARD, M.D.

MOUNT HOLLY, N. J.

UNTIL within a few weeks, Dr. Ward was one of the few surviving founders of this Institute, who were present and personally assisted at its organization on the tenth of April, 1844. He and the writer of this notice were, doubtless, the two youngest of the small band of disciples of Hahnemann who assembled, on the birthday of the master, to establish a society for the promotion of homœopathy, and for their mutual support and encouragement in the conflict which the dominant school was then already waging against the rising system.

He was, at that time, as the writer well remembers him, a young man of quiet and pleasing manners, retiring and modest in demeanor, a bright, intelligent expression, full of zeal for the cause, and heartily in accord with the sentiment which animated the assembly. As we were alike considerably juniors of most of those present, we naturally drew together, both then and in subsequent annual meetings of the Institute, when we met as old friends holding a peculiar relationship. His genial disposition, his hearty greeting and his dry humor made him a most agreeable and attractive associate, and to enjoy his society was, for many years, one of the anticipated pleasures of the yearly sessions. For years past, however, Dr. Ward has been rarely seen at our sessions, and was, therefore, not personally known to many except the older members of the Institute. The last time he appeared among us was, probably, at the Brighton Beach meeting. His countenance was aglow with pleasure, and his eyes shone with new lustre as he received the greetings of numbers of the friends and associates of early days. It seems a wonder that, with his warm heart and companionable impulses, he did not more frequently join his brethren in the annual reunion of his fellow seniors.

Dr. Ward was born January 17th, 1816, at Keene, N. H., of good New England stock. His academic education was chiefly received at Ipswich in the same state. He attended medical lectures at Woodstock, Vt., and subsequently at Jefferson Medical College, Philadelphia, where he also graduated. What circumstances influenced him to consider the claims of the new system at that early date, are not known to the writer, but it is certain that he joined the ranks of the homœopathists not long after his graduation from the allopathic school. That his proficiency as a scholar and his qualifications as a teacher were promptly recognized is shown by the fact of his appointment as professor, or lecturer, in the then newly established homœopathic college in Philadelphia. He signed the diplomas of the first class of graduates from the institution.

About 1849 he settled in Mount Holly, N. J., where he remained during the whole of his life, honored and beloved by all who knew him.

In 1844, as before stated, he responded to the call of Drs. Hering, Grey, Flagg and other prominent disciples of the new school, and attended the meeting in New York, at which was organized the American Institute of Homœopathy.

He was most influential in promoting the success of the great medical reform in New Jersey and especially in securing from the legislature the enactment of laws recognizing and establishing the equal rights of homœopathic physicians in that State. He served as President of the West Jersey Homœopathic Medical Society and also of the State Society. His death occurred at Mount Holly, March, 29th, 1888.

His wife was Sarah Groves, of Philadelphia. She died in 1844.

Walter Ward, Jr., his only son, is a member of the Burlington Co. bar.

ADOLPH LIPPE, M.D.,

PHILADELPHIA, PA.

Of the prominent members of our school who have passed away since the last meeting of the Institute, none is more widely known than the subject of this brief memoir. For many years he has been recognized as one of the most able expositors of the homœopathic system and one of the most accurate interpreters of its materia medica.

Dr. Lippe was a native of Germany, of an ancient and noble family,

his father being Count Ludwig zur Lippe. He was born on the family estate, near Görlitz, May 11th, 1812. His education was thorough and comprehensive, as befitted his rank, and in arts was completed by his graduation from the University of Berlin. He was intended for the legal profession, but becoming interested in the controversy caused by the antagonism of the dominant school of medicine to the rising system of homœopathy, he resolved to devote himself to the study of medical science. Having applied himself for a year or more to the preliminary consideration of the questions between the different methods he decided in favor of the system of Hahnemann.

He came to America in 1839 and completed his medical course in the Allentown Academy of Homœopathic Medicine, graduating with the first class of that historically famous institution, in 1841. For several years he practiced in Pottsville and Carlisle; but subsequently he was persuaded to remove to Philadelphia, where he has ever since lived, pursuing with uninterrupted zeal and fidelity the method to which he had given his early adhesion.

His reputation as a practitioner, teacher and writer has more than national recognition. His labors in favor of the cause to which his life, his strength and his talents, were devoted, were unremitting and arduous. For several years he taught materia medica in the Pennsylvania Homœopathic College, investing that usually dry and difficult department with such interest and lucidity as to impress and attract the most apathetic student. He was a copious contributor to the medical journals of our school, several of which he assisted in establishing, *e.g.* the *Hahnemannian Monthly*, the *Organon* and the *Homœopathic Physician*. The work by which he is best known to the profession is the "Text-Book of Materia Medica," embodying the substance of his teaching on that subject; a mine of useful information, especially for the doubtful and perplexed practitioner. All his published writings are characterized by directness of style and remarkable clearness of statement. He could make himself understood, and sometimes did it, especially in his controversial pages, with a pungency that many thought uncalled for. Having very positive convictions on some questions upon which there have always been diversity of opinions among us, Dr. Lippe was not always patient of contradiction, and especially in later years often manifested a dogmatism that repelled rather than conciliated. This characteristic by no means diminished the respect and admiration of his colleagues for his

remarkable abilities and professional genius, which have been abundantly verified by his long and successful career.

In December, 1884, he lost his only daughter, and two weeks after his eldest son, Dr. Constantine Lippe of New York, died. This double affliction affected him deeply, and from it he never fully recovered. He continued, however, in active practice and in the prosecution of his usual labors until within three days of his death, except occasional interruptions from rheumatic attacks. During the inclement weather of last January he was much exposed, and contracted a cold which rapidly developed into a severe case of typhoid pneumonia and terminated fatally on the 23d of that month, 1888, in his 76th year. He was buried with the solemn services of the Episcopal Church, from St. John's, Thirteenth Street. He leaves a widow and one son.

Dr. Lippe was one of the original founders of this Institute and for many years took an active personal interest in its work, besides in every way, by voice and pen, striving to extend and develop the medical principles to which his life was devoted.

Appropriate action was taken by the Hahnemannian Association of Pennsylvania, at a meeting held on the day following his decease. Resolutions were adopted testifying to the remarkable eminence attained by their late colleague and to their profound appreciation of the great loss the profession had sustained in his death. The event was also generally chronicled by the Philadelphia journals and extended obituaries have appeared in the medical periodicals of our school.

CORNELIUS ORMES, M.D.

JAMESTOWN, N. Y.

Died at Jamestown, April 20th, 1886, Dr. Cornelius Ormes, aged 79 years.

The following biographical sketch of this highly valued member of our fraternity, from the pen of Dr. A. S. Couch, of Fredonia, N. Y., is presented here as the most comprehensive and satisfactory record that could be obtained.

Dr. Cornelius Ormes was born at West Haven, Vermont, Aug. 4th, 1807, of most excellent New England parentage. After receiving a thorough academical education, he entered upon the study of medi-

cine with Prof. Theodore Woodward—at that time the most noted surgeon of the eastern states, and received the degree of M.D. from Castleton Medical College in 1832. After practicing for a time in partnership with his preceptor, he removed to Chautauqua County, N. Y., and opened an office in Panama, Feb. 13th, 1833.

In that early day, this portion of the county and the adjacent parts of Pennsylvania were largely engaged in lumbering, and Dr. Ormes's surgical experience, obtained under Prof. Woodward, peculiarly fitted him for the exigencies constantly arising in that occupation. His ride soon extended into northern Pennsylvania, then almost a wilderness, and his duties entailed upon him great hardships from the bad roads which he was compelled to traverse and the severe exposures to which he was frequently subjected. The success which attended his practice, however, soon gained for him a high reputation, which was increasingly enhanced down to the time of his death.

As the country became more fully occupied and settled, the accidents of pioneer life necessarily diminished and the doctor turned his attention to new fields for the employment of his surgical ability. He made a special study of ovarian diseases and soon established a national reputation for the treatment and removal of ovarian tumors. During his life he removed a large number of these and other new formations, and he continued to operate successfully for their extirpation up to within a few months of his decease. In two of his ovariotomies, the uterine appendages were all involved; the tumor in one being of the colloid variety and weighing 51 pounds, while the uterus measured eleven inches in length, was extensively sphacelated from long pressure, and its cavity wholly obliterated. The entire mass was successfully removed and the patient still lives in the enjoyment of excellent health.

In 1863 the doctor removed to Jamestown, and the better field greatly enlarged his already extensive practice.

In 1872 he was called to the chair of Obstetrics and Uterine Surgery in the Detroit Homœopathic College, and discharged its duties with marked advantage to the college and the cause of homœopathy. Dr. Ormes was first instigated to examine the new system by Dr. James Birnstil, then of Westfield, N. Y., afterward of Pittsfield, Mass. After much study and a careful comparison of results from the old and the new systems, he gave in his adhesion to homœopathy and has consistently practiced it since 1848.

Dr. Ormes was, at the time of his death, and for many years had been, president of the Homœopathic Medical Society of Chautauqua and Cattaraugus counties, was one of the physicians from western New York who assisted to reorganize the State society in 1861, and in which he was a permanent member at his decease; was a member of the new Homœopathic Medical Society of Western New York and a "senior" in the American Institute of Homœopathy, he having been elected a member in 1856. In all of these societies he occupied a prominent place and in all was the frequent recipient of positions of responsibility and of honor. It will thus be seen that Dr. Ormes was gathered "like a shock of corn, fully ripe."

Few physicians have acquired as extensive and enviable a reputation, and none will be more missed by the profession, for those genial and excellent qualities of manhood which shed an additional lustre upon the achievements of an intellectual life.

LORENZO MARCELLUS KENYON, M.D.

BUFFALO, N. Y.

By the death of Dr. Kenyon, the medical profession loses one of its most esteemed members, homœopathy a faithful and able representative, and this Institute one of its venerable and honored seniors. He was born in Sheridan, Chautauqua Co., N. Y., March, 18th, 1821. He received a good education in the common and academic schools of the vicinity and at an early age chose medicine as his profession. His preceptors in this art were Dr. Samuel Foote of Jamestown, and Dr. Carlton Jones of Westfield, both of them practitioners of good repute in their respective districts. After the required course of private instruction he concluded his preparation at the medical colleges at Fairfield and Albany, from the last of which he graduated about 1842.

He first essayed the practice of his calling at Warren, Pa. He continued there and in the neighboring village of Youngstown, about three years. It was in the course of that early part of his career that his attention was arrested by the unexpected favorable result of homœopathic treatment in a case of malignant scarlet fever that seemed past cure under the ordinary regimen. The recovery was so surprising that he felt obliged to undertake an investigation of the claims and methods of the system, to which, up to that time he had been

a stranger. It is understood that the physician who demonstrated, in this instance, the practical advantage of the new treatment, was Dr. W. S. Hedges of Jamestown.

After a sufficient examination of the subject, Dr. Kenyon became fully convinced of the importance of homœopathy as a principle in therapeutics and at once and without reserve, adopted it henceforth as a rule of practice.

About this time he removed to Westfield, N. Y., where he continued till 1856, when he made another change which proved to be of a more permanent character. This removal was to the city of Buffalo, where he formed an association with Dr. N. H. Warner, who held the leading position in the homœopathic school. Subsequently, Dr. A. R. Wright became a member of the firm, which continued unchanged till the death of Dr. Warner in 1860.

For more than thirty years—with the exception of about two years of Southern travel for the benefit of his health—he was a resident of Buffalo, conscientiously and successfully pursuing his arduous profession. Notwithstanding his reserved and unobtrusive manner, his ability as a practitioner was early recognized, and he soon gained and held throughout his active professional life the patronage of a large circle of appreciative families. Besides the constant demands upon his time and labor by his prosperous neighbors, he was lavish of his services among the poor and helpless, and was identified with many of the charitable institutions of Buffalo.

He was a sincere believer in the medical system that he followed and, although naturally of a retiring and pacific disposition, was ready, upon occasion, to maintain its advantages and defend it against adverse criticism from any quarter.

In 1860, or 1861, his health partially gave way, and he felt it necessary to give up his practice for a time. After a year or so, of rest and travel, he essayed to resume his work, but was soon again obliged to retire. He went West and, it is understood, was, for a time, engaged in other business. In 1864, having recovered his health, he returned to Buffalo and once more took up the active exercise of his calling with his original ardor and success.

He continued in the same field without interruption until his final sickness, doing the work of a large practice, enjoying the respect due to a skilful and conscientious physician, a peaceful citizen, a kind neighbor and an earnest Christian.

He was not the pioneer of homœopathy in Erie County, but by his influence and example he did much to extend its credit and acceptance, not only in his own neighborhood, but in western New York generally. His judicious counsel is said to have been very helpful and encouraging to many a young practitioner, who sought his advice.

He was President of the New York State Homœopathic Medical Society, in 1874, and upon the organization of the Homœopathic Society of Western New York, he was chosen its first presiding officer. He joined the American Institute of Homœopathy at Cleveland, in 1853, and was consequently a senior of ten years standing. He was one of the founders of the Buffalo Homœopathic Hospital.

Dr. Kenyon, was not only an example of entire abstemiousness from every kind of spirituous liquor, but was a zealous advocate of temperance in its fullest acceptance. He was a Freemason of high rank and a member of the order of Knights Templar. His religious affiliations were with the Baptist denomination, which he joined in 1855, and of which he remained a devout member and office-bearer until his death.

For several years he had suffered, notably after more than usual exertion or anxiety, occasional attacks of angina pectoris. About six weeks before his death he had a severe attack, which, however, yielded to proper treatment for a time, but to be succeeded after a few weeks by one still more distressing and which proved too obdurate for medical skill. Death came to his relief, November 25th, 1887. The event caused a profound sensation, not only in the profession and his large circle of attached friends, but throughout the city, to almost every inhabitant of which his name was familiar. At his funeral a vast assemblage testified, by its presence, the universal esteem in which he was held, and a deserved eulogium was pronounced by his pastor.

A meeting of the physicians of Buffalo, in which the different schools were represented, was addressed by a number of his surviving colleagues in terms expressive of the general regard in which their late venerable associate was held. Appropriate resolutions were adopted, and the Buffalo journals of the day contained extended obituary and biographical notices.

Dr. Kenyon was twice married: in 1845, to Mercy A. Mann, by

whom he had one son, Dr. William B. Kenyon, of Buffalo; second, in 1880, to Miss De Etta Snow, who survives him, without issue.

WILLARD PARKMAN GAMBELL, M.D.,

BOSTON, MASS.

Dr. W. P. Gambell, a senior member of the Institute, was a native of Barnard, Vt., where he was born Sept. 25th, 1820. His early education was limited to the opportunities afforded in his native town and the neighboring town of Woodstock, Vt. His fondness for learning, however, and his persistent industry in later years supplied the defects of his primary instruction, and he graduated in medicine, with honor, at Pittsfield, at the age of twenty-five.

After his graduation, in 1845, he spent a year or more in an investigation of homœopathy, after which, in 1847, he commenced practice in Francestown, N. H., where he remained ten years. Thence he removed to Haverhill, Mass.; but after two years, again removed to Boston, in 1859. The same year he became a member of the Massachusetts Homœopathic Medical Society. He had already, in 1851, at New Haven, been elected a member of the American Institute of Homœopathy. In this wider field of labor, Dr. Gambell continued practicing assiduously and with good success, during the rest of his life, securing and retaining, not only the confidence and support of a desirable clientage, but the respect and esteem of his professional colleagues. After forty years of honorable service in his calling, twenty-eight of which were spent in Boston, he departed this life, December 1st, 1887, leaving to his family and friends the legacy of an untarnished reputation and the record of a blameless and useful career.

HENRY B. CLARKE, M.D.,

NEW BEDFORD, MASS.

Dr. Clarke will long be remembered as one of the energetic and vigilant senior members of our Association. His death leaves a vacant place in our ranks which is not easily filled. A ready writer, a forcible speaker, with well-formed opinions and an agreeable man-

ner, his discussion of the questions arising in the proceedings of the Institute always found ready and attentive listeners.

His father, Dr. Peleg Clarke, was one of the noted members of the profession of Rhode Island for many years; was one of the founders of the Medical Society of that State and one of the first physicians of the State to adopt homœopathy. The son whose death we are now obliged to chronicle, was born in Cranston, R. I., October 18th, 1827. He was educated with great care, although without the advantages of a university curriculum. He graduated in medicine from the Homœopathic Medical College of Pennsylvania, in 1852, with special honor among a class distinguished for the high standing of its members.

Soon after his graduation, Dr. Clarke commenced practice in New Bedford, Mass., forming an association with Dr. Daniel Wilder, which continued for several years. In 1856, he removed to Des Moines, Iowa; but, within a year, returned to New Bedford where he devoted himself untiringly to his large practice, until about a year before his death. The occurrence of some symptoms, premonitory of the disease from which he finally died, induced him to seek rest and relief by change of scene and climate. With this view he went to southern California, and with such apparently happy effect that he soon became restive under his enforced idleness, and thought himself sufficiently restored to resume his work in that distant field. The result of this renewed effort was an attack of apoplexy from which he died suddenly, March 6th, 1888, at Coronado Beach, Southern California, aged 60 years.

The following estimate of his life and character, taken from the New England *Medical Gazette*, aptly expresses the opinion of those best qualified to speak of them.

"Dr. Clarke was a man of unusual culture and extensive reading. Liberal in his views, with warm sympathies, and courteous in his manners, he early secured a large circle of friends, and his great professional skill and judgment gave him an extensive practice. He was widely and honorably known in the profession. For nine years he has been a Senior in the American Institute of Homœopathy, and has held many important positions in that body. He was one of the charter members of the Massachusetts Homœopathic Medical Society, and was its President in 1870–71. He served as professor of clinical medicine in Boston University School of Medicine for

several years, and many of the early graduates remember the clear and practical instruction they received from him. His presence will be sadly missed in our society meetings, and in the various associations with which he has been connected." The New Bedford "Mercury" says of him:

"He took special interest in the cause of education, and for nine years did faithful service as a member of the school committee. He took an active and practical interest in public affairs, and was ever ready to aid any cause of genuine reform. He did his own thinking, and no one was ever left in doubt as to his opinions upon any question in science, politics, or religion. In social life Dr. Clarke was a favorite; full of genial humor and of winning manner and address; and hosts of friends will recall memories of his instructive and charming talk."

CHARLES H. WALKER, M.D.

CHELSEA, MASS.

Dr. Walker was born in London, N. H., in 1822, and died at his residence in Chelsea, Oct. 4th, 1887, of angina pectoris. He was a nephew of Dr. Alpheus Morrell, formerly a regular and prominent figure in the sessions and affairs of this Institute. Under the judicious tutelage of that worthy relative and patron, he pursued the study of medicine with diligence and success. After the usual preparatory course he entered the Homœopathic Medical College of Pennsylvania. From that institution he received his diploma in the spring of 1853.

He commenced the practice of his profession in Manchester, N. H., and remained there about seven years. In 1859 he removed to Chelsea, Mass., when he soon occupied an inportant position in the public estimation, as a capable and trustworthy practitioner. Unfortunately, in 1865, a severe accident interrupted his prosperous career and so disabled him as to make it necessary to give up practice altogether for about three years. When partially recovered, he was for some time at Nantucket, and still later at Jamaica Plain. But in 1870, having fully regained his health, he returned to his former field of labor and to the great gratification of his old patrons resumed his practice among them; and there he continued his successful work during the remainder of his life.

Dr. Walker was highly and justly esteemed by his professional colleagues as an able and judicious counsellor. He was accomplished in his vocation and a thoroughly well grounded homœopathist, and zealous in the advocacy of the system of which he was so sincere a representative. He was elected to membership in this Institute at Albany in 1854, and attained the rank of a senior in 1879. He was also President of the Boston Homœopathic Society and Vice President of the Massachusetts Homœopathic Society.

WILLIAM H. RANDEL, M.D.

ALBANY, N. Y.

Dr. Randel was a native of the city in which his whole professional life was passed and in which he died. He was born in Albany, August 28th, 1832. His academical education was acquired in Newark, N. J., under the supervision of his uncle, the late William R. Weeks, D.D., a well known educator and disciplinarian. Afterwards he returned to Albany and studied medicine in the office of Dr. John A. Paine. One course of lectures he attended at the Albany Medical College in the session of 1849-50. The concluding year of his college course was as a member of the medical department of the University of the City of New York, from which he received his diploma in the spring of 1851.

Immediately after his graduation he began the practice of Homœopathy in Albany, and with the exception of about one year, 1867, which he spent in European travel and study, he resided constantly in that city, where his many desirable qualities of mind and his professional ability were well appreciated, and he succeeded in building up a large and lucrative practice.

Few physicians have been more devoted to the duties of their calling. He never allowed himself any rest, he rarely attended any place of amusement, and was seldom absent from the city.

Blessed with a vigorous constitution, not given to any irregularities or excesses, he could always be relied on for any duty, however arduous or exciting. In his practice he might be called conservative. Though firm in his convictions as a homœopathist, he was more inclined to study the resources of well-established methods than to experiment with new and untried measures.

He was elected a member of the American Institute of Homœopathy in 1854, and became a senior in 1879. He was present and participating at the formation of the Albany County Homœopathic Medical Society, of which he was President in 1865. He was its delegate for a number of years to the State Homœopathic Society, and became a permanent member of the latter in 1873.

Dr. Randel was closely identified with the history and progress of the Albany City Dispensary and Homœopathic Hospital from its begining in 1868. He was one of its first Board of Trustees, and has ever since, until his death, served either as member of the Medical Staff, or as one of its consulting physicians.

The circumstances of his fatal seizure were peculiar; while in attendance on a case of labor and in the act of applying the forceps, he was suddenly attacked with apoplexy which terminated in death within two days, on Dec. 14th, 1887. He leaves a wife and two children.

At a special meeting of the Albany County Homœopathic Society held soon after, eulogistic remarks were made and appropriate resolutions of esteem were unanimously adopted by his surviving colleagues.

CHARLES SUMNER, M.D.

ROCHESTER, N. Y.

No physician was better known in his locality than the subject of this brief notice. During the thirty or more years that he pursued his calling in Rochester, he occupied a prominent position in the public estimation. He was born in Butternuts, Otsego Co., February 15th, 1821. After the acquisition of a thoroughly good preliminary education he read medicine with his uncle, Dr. H. Bronson, of Windsor, Broome Co. He attended a course of lectures in the New York Medical College and subsequently transferred himself to the Homœopathic Medical College of Pennsylvania, from which he received his degree in 1856. After his graduation he returned to his native county and commenced the practice of his profession in Gilbertsville, where he remained ten years. At the end of this time he was induced to remove to the city of Rochester, in which wider field he soon acquired distinction as a successful and reliable practitioner, which he maintained during the whole course of his life. Painstaking and con-

scientious, he gained readily and held easily the confidence of his large body of patrons. He was a zealous friend of homœopathy, which he did much by his influence to extend and establish in Rochester and in Central and Western New York. He was a prime mover in the Homœopathic Hospital project. He was President of the Monroe County Homœopathic Medical Society, a permanent member and Vice President of the N. Y. State Homœopathic Society. As a special distinction the Honorary Degree of M.D. from the Regents of the University of the State was conferred on him. His membership in the American Institute dates from 1865. He was also President of the Central N. Y. Homœopathic Medical Society.

Notwithstanding his close and unremitting devotion to his professional duties, he retained in a remarkable degree a vigorous state of health during almost the whole of his life. About three weeks before his death he was suddenly seized, while returning from a consultation, with a spasm of pain in the cardiac region. This was the first intimation that he had of anything wrong in that quarter. The affection gradually became more serious, and although he was anxiously attended by several of his professional colleagues, he sank under its severity and died on the 5th of May, 1888. The event, so sudden, was a surprise and a grief to a large section of the community to whom his presence was so familiar.

The imposing funeral services was held in St. Peter's Presbyterian Church, Rochester, members of the local Homœopathic Medical Society acting as bearers. Extended reference to the public loss was made by the city press, and appropriate action was taken by the various societies and institutions with which he was connected.

The surviving members of his family are his widow, one daughter and a son, Dr. Charles R. Sumner, a member of this Institute, who has been for several years associated in practice with his father and now succeeds him.

NATHANIEL RANDOLPH SEELEY, M.D.,

ELMIRA, N. Y.

After a long period of ill health, varied by more or less frequent attacks of severe suffering, this highly esteemed member of our fraternity, departed this life, March 4th, of the present year. He was

born in the town of Jackson, Tioga Co., Pa., adjoining the southern boundary of New York, August, 1833. His ancestor, Nathaniel Seeley, went into that country towards the end of the last century and became possessor of a large tract of land along the fertile valley of the Chemung. On one of the farms included in this estate our worthy colleague first saw the light. His boyhood was spent upon the farm and his early education was drawn from the neighboring schools. As he advanced in years he felt the inadequacy of the instruction there dispensed. He sought higher advantages at the academy in Elmira, riding or driving over from his home on Monday morning and returning in the same way at the end of the week, or oftener. After graduating with credit from that institution, he was received into the office of Dr. D. A. Towner, as a student of medicine. The eagerness he had shown in the pursuit of his academic education was characteristic of his subsequent course, not only during the whole period of preparation, but in the enthusiasm with which he threw himself, heart and soul, into the practice of his profession when he had obtained it.

After obtaining his diploma from the Cleveland Homœopathic Medical College, he established himself in Corning, where he remained several years, laying the foundation of his future success in a profitable experience.

After a few years, he removed to Elmira, where he had already passed so many years of his youth and early manhood and which held out many attractions to him. He had already married, in 1859, Miss Mary C. Stuart, of Bath, a lady who, by her energy, prudence and devotion, proved an admirable wife and true helpmeet for a hard-worked doctor. She survives, with three children. Two others died in their childhood.

For several years Dr. Seeley suffered from an affection of the stomach which caused him much distress and obliged him, from time to time, to suspend his professional labors and seek relief in change of scene, or in absolute rest. Even in the course of his usual duties his suffering was sometimes very trying. To his friends it was often a marvel how he was able to perform the ordinary duties of his large practice. Although a member of the Institute, from 1867, he was seldom present at its meetings, his state of health rarely permitting him to be absent from his home except when obliged to seek temporary relief from his sufferings. The same cause pre-

cluded him from contributing, to any extent, to the literature of the profession from the stores of his large experience.

His death, though not unexpected by his family and friends, produced a profound emotion in the community, and was commemorated by a large concourse of his fellow-citizens of all classes at his funeral and appreciative references by the public press of Elmira and Chemung County.

TITUS LONSON BROWN, M.D.,

BINGHAMTON, N. Y.

Dr. Brown was born in Hillsdale, Columbia Co., N. Y., October 16th, 1828; received a liberal education and devoted himself to medical studies with enthusiastic diligence.

He was a member of the University Medical College of New York, in 1847 and 1848, and subsequently of the Homœopathic Medical College of Pennsylvania, from which he graduated in the spring of 1853.

He settled in Binghamton, where he enjoyed a large practice and where he remained in the assiduous prosecution of his profession until his death, August 18th, 1887. He was elected a member of the Institute, in 1867, and was a regular and familiar participant in the work of the association. He was specially interested in physiological and psychological questions, in the discussion of which he contributed a number of papers. In religion he was an avowed skeptic and was well known as holding extremely liberal views in politics and ethics.

Further information respecting the life of Dr. Brown, though diligently sought for, has not been obtained.

ARTHUR P. HOLLETT, M.D.,

HAVANA, N. Y.

Dr. Arthur P. Hollett was born April 11th, 1847, at Geneva, N. Y. His early education was carried on under the care of his cousin, W. W. Runyan, at the Sonora Academy. Before the curriculum of his academic studies was completed, the civil war broke

out. Animated by patriotic fire, he aided in raising and organizing a company, mostly composed of his instructors and fellow-students, which under the command of one of the teachers, was consolidated with the 189th Regiment, N. Y. Volunteers. It was mustered into service, Sept. 1864. Its record was carved in the fore-front of battle at Hatcher's Run, Five Forks and Appomatox. His regiment had the honor of participating in the grand review at Washington, at the close of the war, and it was mustered out of service at Elmira, N. Y., June 9th, 1865.

His military career having closed, he applied himself to the study of medicine in the office of the late Dr. H. I. Benedict, of Corning, N. Y. In due time he matriculated at the Homœopathic Medical College of Pennsylvania, from which institution he graduated, March, 1869.

Soon after receiving his degree, he opened an office for the practice of his profession, in Havana, N. Y., where he soon became popular and attained a large and lucrative practice. He was always prominent in the councils of his school. He was largely instrumental in organizing the Schuyler County Homœopathic Society; also the Southern Tier Society, embracing the counties on the southern border of the State of New York. He was a delegate to the New York State Society, in 1872, to which he was, two years later, elected a permanent member, and in the same year, at Niagara Falls, became a member of this Institute. In 1879 and 1880, he acted as Corresponding Secretary of the State Society, and in 1881, was elected Recording Secretary. In the latter position, he served three consecutive years, discharging its laborious duties with great ability and to the entire satisfaction of the Society. In 1884, he was promoted to the Vice-Presidency, which office he held two years.

During these years, he was a frequent and able contributor to its TRANSACTIONS and other publications. In an editorial published by him in *The Regular Physician*, in 1884, he writes: "From our success during all these years of practice, we are more than ever confirmed in our belief in the law of *similia similibus curantur*, as the true and only scientific rule for the practice of medicine. When we take a retrospective view of our practice for these many years, we are fully satisfied with the results."

In the department of obstetrics, Dr. Hollett was esteemed an expert, not only by the popular verdict, but in the judgment of his profes-

sional colleagues. His eminence in other branches of the profession, as well, was based upon true merit and intrinsic ability, coupled with a genial disposition and a manner at once so modest and assuring as to win, without conscious effort, the confidence and admiration of all who knew him.

From an early age his life was influenced by the principles of religion. He was active in the church to which he belonged, and was always ready to aid in promoting any good cause. His love for his profession and his sense of Christian duty were so united in him as to form a character admirable in its completeness. He sacrificed his life to duty. While treating a family ill with diphtheria, he contracted the disease himself, and after an illness of only four days, succumbed to its fatal severity, September 29th, 1887, in his forty-first year, while yet in the vigor of his manhood and with the prospect of of a long and enviable future. The death of such a man is, indeed, a serious loss to the profession, to the church and to the community. The affliction of the bereaved family was intensified by the loss, within a month, of an only surviving son, a promising lad of thirteen years, who was stricken with the same disease and after lingering a few days, died October 17th; an event of such peculiar sadness as to awaken the sympathy of a great circle of friends towards the afflicted widow.

Although so actively engaged in the exacting duties of his profession, Dr. Hollett's services were frequently demanded in the local affairs of his county and district. For several years he was a Trustee of the village of Havana; for three years he served as Coroner of Schuyler County; many years he was a member of the Board of Education of Havana, and for several successive terms its President. In all these positions his good judgment and intelligent direction were ever exerted in their faithful management for the interests of his constituents.

HORACE E. BOARDMAN, M.D.,

MONROE, WIS.

Dr. Horace E. Boardman was born in West Rutland, Vt., in 1835, where he lived during his childhood. When a youth he was sent to school at Burr Seminary, Vt. He graduated in arts from Middle-

bury College in 1856, and subsequently taught school for several years in different places in the East and West.

In 1863 he was married to Miss Susan C. Locke, of Langdon, N. H., who survives him.

In 1864 he graduated in medicine from the Hahnemann Medical College, in Chicago, and at once entered upon active practice in Menaska, Wis. After a residence in this place of about five years he removed to Sun Prairie, Wis., where he practiced nine years, when he again changed his field of labor to Monroe, Wis., where he remained ten years. He was President of the Wisconsin State Homœopathic Society, in 1884, of which body he was always an active and influential member, preparing every year papers of merit on different topics relating to medical science.

In the fall of 1887 his health failed him, and he was obliged to relinquish practice entirely, and in accordance with professional advice, removed to Larned, Kansas, where his son, Dr. E. W. Boardman, is engaged in the practice of medicine, hoping that a complete vacation and change of air would benefit him. In this hope, however, his friends were disappointed. His strength continued to fail, and on the 26th of February of the present year, he died of apoplexy.

Dr. Boardman was highly esteemed in the several places in which he practiced his art, as a most excellent and sympathetic physician and an upright and exemplary Christian gentleman, and his decease, at the comparatively early age of 53 years, is deeply lamented by many friends.

He leaves a widow and two sons, one of whom has practiced medicine for four years.

He was elected a member of this Institute at the Milwaukee session, in 1880.

S. HOPKINS KEEP, M.D.,

BROOKLYN, N. Y.

Dr. S. H. Keep, a son of our late venerable associate, Dr. Lester Keep, and one of a family of physicians, was a native of New Haven, Conn., where he was born May 12th, 1846. He received a liberal

education at Russell's Collegiate School, in his native town, and at the Berkshire College, at Pittsfield, Mass. He completed his medical studies in the New York Homœopathic Medical College, from which he graduated in 1866.

His father had, in the meantime, removed to Brooklyn, N. Y., where he not only enjoyed abundant success, but was able to find sufficient occupation for his two sons as assistants. After the death of the father, the elder son assumed the business, and S. Hopkins, the subject of the present notice, struck out independently and was successful in gaining the confidence and support of a large clientage of intelligent and desirable families.

His death, which was the result of a protracted typhoid fever, occurred October 26th, 1887, in the forty-second year of his age, and in the midst of a career of honor and usefulness. The loss of a colleague so capable and thoroughly furnished, cannot but be deplored by his professional brethren and deeply felt by a numerous body of faithful patrons.

Besides his large and growing private practice, his labors and his interests were, for many years, closely identified with the Gates Avenue Homœopathic Dispensary. At the organization of that now flourishing and important institution in 1867, by his brother, he was appointed house-physician and, subsequently, medical director. Under his prudent administration the enterprise was enabled to struggle successfully against many difficulties and gradually to extend its range of ministrations to a vast number of sick poor. On the occasion of his death, the Trustees of the institution gratefully recorded their high appreciation of Dr. Keep's long and valuable services by an unanimous vote of the board.

Our deceased associate—he was elected a member of the Institute in 1881—was a man of quiet ways and cultivated tastes. Though deeply interested in medical science and personally devoted to his professional duties, he took but little active part in medical controversies, or medical politics. He was studious in his habits, a fine scholar and a connoisseur in art, possessing, it is reported, one of the finest private collections of paintings in the city of Brooklyn.

Dr. Keep leaves a wife and two children; a son of ten, and a daughter of eight years of age.

EPHRAIM W. SOUTH, M.D.,

PLAINFIELD, N. J.

Dr. South was born near Bristol, Bucks Co., Pa., Sept. 8th, 1835. He had but few educational advantages except those to be gained in a country school, yet he so improved his opportunities that he became a teacher for a considerable time during his early manhood. He married in 1856, and soon after removed to Wilmington, Del., where in a few years he became very much interested in homœopathy.

His preceptor was Dr. August Negendank, of that city, who is still a practitioner there and a member of this Institute. Dr. South, having pursued the prescribed course of study, graduated from the Homœopathic Medical College of Pennsylvania, in the spring of 1869. He began practicing at once in Somerville, N. J., but after remaining there a year, a more favorable field opening in Plainfield, N. J., he removed to that place, where in a short time he established a successful and lucrative business.

Never possessing a robust constitution, the exacting requirements of his increasing practice drew heavily upon his strength, so that after twenty years of professional toil, conscientiously performed, he was advised to seek the restoration of his failing health by a trip to Europe, in the hope that the voyage and the relaxation from his duties might prove beneficial. Yielding to this advice, in the spring of 1886, Dr. South went abroad; but though he thoroughly enjoyed the change it was not followed by the much desired effect, so that after his return home in the fall, he made arrangements to retire from his practice altogether, and seek absolute rest, removing to Philadelphia. This he did in the spring of 1887.

From that time, however, his health continued steadily to fail, and symptoms arose which gave evidence of an overtaxed brain. On the 2d of April he was stricken with apoplexy. He lingered until the 8th, when he was mercifully relieved from his sufferings, being in his 53d year.

He joined the Institute in 1881 at the Brighton Beach session, and was recognized on all hands as a consistent and intelligent member of our school. He contributed occasionally reports of interesting cases and observations upon points of practice to the medical journals and

to the New Jersey State Homœopathic Society, of which he was a member.

Dr. South was a member of the Society of Friends, and was universally esteemed for his uniform consistency and uprightness of character, as well as for his skill as a physician.

ARTHUR A. CAMP, M.D.

MINNEAPOLIS, MINN.

It is with peculiar regret that we record the decease of this young and talented member of our profession, upon whose zeal, genius and learning so many anticipations of future success were built.

Dr. Arthur Camp was born in Hoboken, N. J., in 1855. He was the son of the Rev. Norman W. Camp, D.D., a distinguished clergyman of the Episcopal Church, now of Washington, D. C., and his literary and classical education was chiefly pursued in the celebrated school established by Bishop Hopkins at Burlington, Vt. His medical studies were followed according to the curriculum of the New York Medical College, from which he graduated in 1877.

The following year he made a prospecting tour to the West, and finding what he thought an inviting field in Minneapolis, resolved to locate in that attractive and thriving city. Having so determined, he returned to the East and was there married in August, 1878, to Miss Mary P. Walton, at Saratoga Springs, N. Y., and with his wife removed permanently to Minneapolis. In a short time he became popular with the people and was cordially received by the profession.

His active and impulsive nature soon found opportunity for its exercise in the interest of medical science and especially in homœopathy, in the West. He was a busy man in the societies and institutions of his adopted city and state. His energy and enthusiasm were contagious, and his example served as an incentive and stimulus to many others. Quite early in his career he was elected President of the Minnesota State Institute of Homœopathy, and afterwards served for two years as Secretary. He was greatly interested in the improvement of the Homœopathic Materia Medica and elaborated an improved system of co-operation in provings by the different State societies, which, after explanation by him at the Deer Park session of the American Institute, was approved and adopted by this Society.

It is to be regretted that he had not the opportunity of assisting in the working out of the method he with so much labor and trouble prepared.

After practicing seven years with a success rarely attained by a young man, however gifted, in so brief a time, Dr. Camp came to the determination to give up the practice of his laboriously acquired profession. The reasons for this sudden change of purpose do not readily appear; but for the last three years of his life he was occupied with other business. He retained, however, his wonted love for study and continued to be, during the brief remainder of his life, a close observer of the progress of science and discovery.

The death of Dr. Camp was entirely unexpected. On the 9th of April last, after a day of much important business, he went to his house complaining of feeling ill. Said he had eaten something that had disagreed with him. After temporary relief he became worse in the evening, and about eleven o'clock suddenly expired. No evidences of poison being discovered, the fatal attack was attributed to heart failure. His remains were interred at Saratoga, N. Y. His family consists of a widow, a daughter and two sons, the youngest two years of age.

Resolutions expressive of the strong recognition of his many admirable qualities of heart and mind, his integrity of character and his genial and friendly manners were adopted by the Homœopathic physicians of Minnesota in their several societies.

ELAM C. KNIGHT, M.D.,

WOODBURY, CONN.

Dr. E. C. Knight, a highly esteemed physician and member of this Institute since 1867, died suddenly of paralysis, March 21st, 1888, at Woodbury, Conn. He formerly practiced in Waterbury, in the same State, but for a year or more previous to his death had resided in Woodbury. He had suffered for some time with an affection of the kidneys, and, it is understood, had to a large extent retired from active practice. For a few months before the fatal attack there appeared to be a marked improvement in his condition.

He was a member of the old Massachusetts Homœopathic Fraternity in 1854, which preceded the State Society. He was a prac-

titioner of age and experience, deserving of a more extended record, the materials for which, however, though hoped for, have not been furnished.

WILLIAM M. ZERNS, M.D.

PHILADELPHIA, PA.

Dr. Zerns was born in Salem County, N. J., the only son of John R. and Lydia F. Zerns. He studied medicine under the preceptorship of Dr. Aquilla Lippincott, of Salem, and graduated from the Hahnemann Medical College of Pennsylvania, in March, 1873. He settled in Philadelphia and soon became a popular and rising physician, and gave promise of attaining an elevated rank in the medical profession. He joined the Institute in 1881, and was one of the founders of the Bœninghausen Medical Club, of Philadelphia and one of its zealous members. He was also a member of other societies for the cultivation and promotion of medical science.

He married in 1882 and leaves a wife and one child to mourn his loss. After a long illness, which he bore with uncomplaining patience, he departed this life, September 21st, 1887, at the home of his wife's parents in Watertown, N. Y. at the early age of thirty-five.

Dr. Zerns was a consistent member of the Society of Friends and was buried in the Friends' cemetery in Salem, N. J., six of his colleagues of the Bœninghausen Club acting as bearers to his last resting place. The following action was taken at a meeting of the above-named Society soon after his decease.

William M. Zerns, M.D., of Philadelphia, having been removed from our social and medical circle by death, we hereby *Resolve:*

1st. That we recognize in his decease the loss to ourselves of a valued friend and counsellor, and to the medical profession of an honest, conscientious and skilful physician.

2d. That we extend to his family and friends in their sad bereavement our heartfelt sympathy in the loss of a loving husband, a kind father, and a beneficent friend.

3d. That a copy of these resolutions be sent to his wife, that they be published in the *Hahnemannian Monthly* and *Homœopathic Physician* of Philadelphia, and that they be entered in the Journal of this Society.

H. NOAH MARTIN, M.D.
GEO. W. SMITH, M.D.
Committee.

JASON W. DRAKE, M.D.

DOVER, N. H.

The death of Dr. Drake, which occurred nearly three years ago, became known to this Bureau only within the present year.

The following few particulars are all that have been ascertained concerning him:

Dr. J. W. Drake was born at Easton, Mass., Jan. 29th, 1838. He was educated at Pierce Academy, Middleboro, Mass., and graduated as M.D. from the N. Y. Homœopathic Medical College in 1867. He practiced medicine in Dover, N. H., nearly twenty years with success and was highly esteemed and respected as a public-spirited and valuable citizen, as well as an able and reliable physician.

Besides his professional labors, his services were also repeatedly demanded by his fellow-citizens in various positions of trust and responsibility, such as Coroner, Justice of the Peace, Member of the School Board, etc.

He died of apoplexy, Nov. 20th, 1885, aged 47 years. His widow now resides in Colorado.

BUSHROD W. JAMES, M.D.: The name of Walter Ward was mentioned by the Necrologist. I have known him intimately almost from my boyhood. He was a noble, true type of manhood and a successful practitioner, and had the entire respect of all in his own town and section of the State. I think all the members of the New Jersey State Homœopathic Medical Society, in which he used to take a deep interest, respected him and regarded him as one of their best members. He was well educated in the practice of his profession, and this Institute does well to honor him by the mention of his name in this memorial way. I could say much in praise of our deceased Senior and honored member of the Institute. He has not been able to attend the meetings in latter years, with the regularity he formerly did, and yet his interest in the cause had not waned.

I would also offer a few words of tribute to the memory of Dr. Clarke. He was one of those genial, affable men that win hosts of friends. He was very rigid in his perceptions of right and wrong. He was quick in debate, and many times upon the floor of this Institute has he ardently spoken in behalf of homœopathic doctrines and interests. Everybody respected his views, because everybody

knew the sincerity of the man. The entire membership of the profession in his own State respected and revered him.

Let me also say a word in memory of a younger member of the profession and of this body who has recently passed away. I refer to Dr. Zerns, of Philadelphia. He went into the study of homœopathy with zeal, and overworking himself in practice brought on a lingering neurotic illness which caused him much suffering and obliged him to give up the practice of his profession a year or two before his death. Doing a vast amount of hard work, among both the humble and the wealthy, he finally broke down and although he struggled hard to recover he failed in the attempt and was summoned to his rest beyond the tomb. He was a man of integrity and uprightness, a man of estimable worth, working, even to the death, in the cause of homœopathy. May pleasant and joyous memories of their past lives sweetly linger about the names of our late fellow-members, who have been called from their labors into the realities of the eternal world.

T. Y. KINNE, M.D.: I wish to speak of Dr. Ward, as a quiet, earnest man, who had ever a love for his profession and his brethren in his heart. He did a great deal of work which was not apparent, but which laid a foundation of work and action for the future benefit of the medical profession. As Dr. James has said, he was respected and loved by all those who were fortunate enough to gain his professional services. Those who knew him best loved him most. After a long life of diligent, active work, he rests from his labors and his works do follow him, not only for his own eternal good, but for the permanent prosperity of the cause of homœopathy.

L. C. GROSVENOR, M.D.: When I was a young man visiting Philadelphia, I had a letter of introduction to Dr. Lippe, and I called upon him. Ever since then his courtesy and kindness have been pleasant memories to me. I got some impressions from him then as a practitioner and diagnostician, in regard to the administration of remedies, and methods of their selection, often welcome in practice. You know how pleasant it is for a young practitioner to receive suggestions like these from his older friends, and I take pleasure in mentioning with gratitude and friendship what has been in my mind and heart ever since.

H. C. ALLEN, M.D.: Dr. Lippe was known wherever the name of our school is known, and probably no member in our school was ever more honored or held in higher esteem for his ability as a close and accurate prescriber. In this particular he was simply wonderful, and the facility with which he grasped the *salient* point—the unique, peculiar or uncommon points of the case—and fitted his remedy in his characteristic way, has not been surpassed by any man in our school, since the days of Hahnemann; and I doubt if the latter could do it as well. Dr. Lippe did not prescribe like many of the

men in our school, Dunham, Hering, Guernsey and others, who were compelled to carefully write down the symptoms of the case, and then find the remedy by persistent study. He, no doubt, was sometimes compelled to do this, but his wonderful knowledge of the characteristic symptoms of our materia medica—and no man excelled him in this—enabled him to grasp these particular features and cure cases in which perhaps his superiors in other departments had failed. There were undoubtedly men who excelled him in other departments of medicine, but in this particular field he stood almost alone. Dr. Lippe waged an unceasing opposition to anything which he considered to be unhomœopathic in practice. To any deviation of what he considered the law, he was a bitter opponent. I shall never forget my debt of gratitude to him.

Dr. Ormes was one of the pioneers in Western New York. He was an indefatigable worker, a hard student, an earnest and enthusiastic homœopath, and what was more rare when he came to this section, an admirable surgeon. He was one of the first surgeons to begin abdominal surgery. His ovariotomies first attracted attention to him from the West, and later he was called to the chair of obstetrics in the Detroit Homœopathic Medical College. Here as a teacher for one or two terms, he gave wonderful satisfaction to the students and faculty, and the physicians of the State, with whom he had many consultations and for whom he performed some successful operations. He was revered in his own neighborhood and wherever known.

I have known Dr. Camp since he was a student. Knew him as an earnest, enthusiastic worker, and a strict follower of Hahnemann, so far as the adaptation of the remedies themselves were concerned. He went to Minneapolis just before the boom struck the city, and by fortunate purchases of real estate accumulated a fortune. I do not know the particulars of his death.

Thomas Franklin Smith, M.D.: Once more, in God's goodness and kindness, we are permitted to meet together in our annual convention, to greet each other with kindly words and hearty grasp of the hand, and by the relation of our daily experiences to assist each other in our daily labor for the alleviation of suffering humanity. These yearly convocations do us good, not only in the benefit we derive by listening to these experiences and relations of our year's work, but also by the strengthening of those bonds which bind us together in one common fraternity. But, as we look around, we miss a number of familiar forms and faces whom we have been so accustomed to meet and greet among us; we see vacant seats which have been filled by those who have for many years added to our enjoyment and instruction by words of hearty cheer and sound practical thought. It seems strange to be here without them, but the last summons has come to them, and they have been called upon to

go on in advance of us to that land, towards which we are all travelling, and we are here to-day permitted to speak a few words in regard to the esteem and the love which we bore towards them, and we do it in all sincerity and affection.

A year ago, as we greeted our old friend, Titus L. Brown, and heard him speak to us, we little thought within a very short time he would be called upon to lay down his work, and enter into the unknown world, and that at this time his accustomed seat among us would be vacant, but so it is. I think that there is not one of us but will acknowledge that Dr. Brown was a man of considerable thought; he was always endeavoring to dig down into the unknown regions and bring up what was to be found there. Although in very many of his views we could not agree with him, yet we could not but feel that he was honest and conscientious in his convictions, and was perfectly willing that we should be allowed the same freedom of thought and action that he claimed for himself. He was afraid of no one; he stood up boldly for what he believed to be the truth, and was not to be turned or swerved from his opinions by any sneer of his fellow-men. He was not one to form an opinion hastily, but he took time for deliberation. When he met what he considered to be error, he fought it with all the power that he could bring to bear against it, and always to the bitter end. As a practitioner of medicine, he was a good student and a careful prescriber, and by these means he had been very successful in his profession. While there were some things about him which we would not desire to imitate, there were very many virtues which we might do well to emulate. We shall miss him in these yearly gatherings.

Another form whom we miss to-day, is our friend and brother, Henry B. Clarke, M.D.; one who loved to join with us in our deliberations and in our social meetings. I have known Dr. Clarke for many years, our acquaintance dating back to the time when I was a young man, and I have always loved him for his many good and excellent qualities, and have been proud to look upon him as a friend. I do not think that any one could be brought into contact with him without being impressed strongly with his kind, gentle disposition; there was a sort of magnetic influence about him which seemed to draw every one towards him who came anywhere near him. He never obtruded himself upon any one, but, on the contrary, was modest and retiring in his disposition, seeming to prefer rather to keep in the background, and yet his companionship was eagerly sought by all who knew him. He had acquired a good practice in New Bedford, and was beloved by everybody. Since coming to this gathering of the Institute, I have learned one or two facts from Dr. H. B. Van Norman, which may not be generally known. While standing upon the piazza of the hotel, at Coronado Beach, California, where Dr. Clarke died, Dr. Van Norman heard suddenly that a gentleman,

supposed to be a physician, but who was not known by anybody, had fallen down in a fit and died; going to the place where the body was and uncovering it, Dr. Van Norman immediately recognized it as being that of Dr. Clarke, although he had not been aware that the latter was in that vicinity; he at once had the remains embalmed, placed in a copper casket, and forwarded to Dr. Clarke's family in New Bedford. It will be a long time before we shall forget that much-loved form which has so frequently been seen in our midst.

Another veteran has fallen in the person of Adolph Lippe, M.D. Although for several years he has not met with us, yet we shall miss him from our ranks, for he was a man whom we all highly esteemed. While, as a man, he lacked the personal magnetism which some have to attract others to them in a social way, yet in a professional capacity he had hosts of friends and followers, those who looked upon him as a grand leader, and upon whose wisdom and keen forethought they were prone to depend in hours when they required such assistance as he was able and always ready to give. Dr. Lippe, like Dr. Brown, was a man who was never afraid to take his stand against everything that he felt and believed to be error, and to stand up boldly and fearlessly in the defence of what he considered to be truth; no man could swerve him from his convictions, either by ridicule or sarcasm; I do not mean to say that Dr. Lippe was a stubborn man, and would not be convinced; but he was one who studied well and carefully every point before taking his stand upon it, so that when he did do this, it was almost impossible to turn him. His loss will be deeply felt among his professional brethren and associates.

Of E. W. South, M.D., I have not so much to say, although I have been acquainted with him for a nnmber of years. It was very seldom that he has been seen at the meetings of the Institute, as he kept himself very closely confined to the practice of his profession, and very seldom went away from his home. Born a Friend, he possessed the well-known characteristics of that denomination; his entire life was an example of everything that was good, amiable and loving; it could well be said of him, I think, "None knew him but to love." He was a pure homœopathist, never deviating from the law "*similia similibus*," but adhering to it closely and firmly. In the community where he had lived for many years, he was looked up to almost as a father, and a vacancy has been created there which it will be difficult to fill.

And so, fellow-members, one after another is being removed from our ranks, gone to join those who have journeyed on before them. We bid each other adieu to-day, and go to our homes and respective work and duties; let us carry with us in our daily labors the memory of those who formerly worked side by side with us in the advancement

of the cause we love, and let us strive to emulate their example in doing everything that we can to lift up and elevate as well as relieve humanity, let us follow as closely as possible in the footsteps of the Master who thought not of himself or of his own pleasure and comfort, but who "went about doing good," so that when our time shall come to leave our work here to go up higher, it may be said of each of us that the world has been made better by our having lived in it, and then we shall receive the welcome, "Well done, good and faithful servant; enter thou into the joy of thy Lord."

I. T. TALBOT, M.D.: I cannot allow the name of Dr. Clarke to pass by without rendering some tribute to one who has been an intimate and valued friend throughout my professional life. He preceded me one year in the profession, graduating from the same school in Philadelphia, the old Pennsylvania Homœopathic Medical College, in 1852. In his class he was one of the warmest-hearted, most earnest, clear-headed and efficient of men. He carried these characteristics all through his life. He made friends even of his strongest opponents, holding to his opinions clearly and forcibly, unyielding in what he thought was true and right; at the same time he presented them in such a form that the bitterest opponent of these opinions still had a warm respect for the man, confidence in his sincerity, and a feeling that he had good reasons for the belief which he entertained. We can well understand that such a character carried into all his relations in life a pleasant feeling; into his home, which he cherished, into society, of which he was an ornament, into the profession, in which he was an honored member, into the State and National society, where he has held high positions; and I speak within bounds when I say that not a single physician of Massachusetts but had a warm place in his heart for Dr. Clarke. His labors, continued through so many years, told upon him and in the last part of his life his strength was not equal to his wishes; suddenly in his own home he dropped but in a few days rallied again. However, his strength never came back and yet he thought that a journey to California might restore his waning strength, and he went there. In the invigorating balmy air of that State he improved very much, and his first desire was to do something more for the profession, but the attempt proved too much, and he died suddenly as has been told us. The older members have merely to recall his name to remember the pleasant associations connected with him, and his memory will long be kept green in this Institute, in which he was for many years a Senior.

Dr. Gambell was a man who early in life gained the respect of his fellow-citizens. Made a representative of his native town while still a young man he was honored with several important offices. As a practitioner he was a man of very clear insight, a very careful observer, and as a result he was a most excellent practitioner. Ill health for

many years excluded him largely from the profession, and perhaps prevented the exhibition of those social qualities that were so largely developed in Dr. Clarke. He was a man of the strictest integrity, and of pure life.

Of Dr. Walker I can speak more intimately. He was my classmate at Philadelphia. He was always on the alert for anything that would benefit medical science, and particularly homœopathy. He was a man of very genial character, a man who always wanted to see those around him happy. Ill health also prevented him from doing as much as he desired to. He was vice-president of the State society at the time of his death.

A. C. Cowperthwaite, M.D.: I want to say a word in memory of Dr. Kenyon. I feel that I cannot say enough. Our friendship began many years ago in the Institute, and I have never had a friend in the Institute that I thought more of, or for whom I had a higher regard. When I called on him last summer I felt that I was seeing him for the last time. I did not hear of his death until three months after the sad occurrence. Though not of late years an active worker in the Institute, yet he loved its interests. He has left a picture of pleasant memories.

A. R. Wright, M.D.: Of Dr. Kenyon it is difficult for me to speak, having been so intimately associated with him in professional, family and church relations. Feeling such a tender regard for him, speaking of him is almost giving an eulogy on a member of my own family. I regarded him as a true, pure man, firm in his convictions of duty, acting up to them to the best of his ability in all the relations of life. He never noted when his physical strength gave out, for whatever was necessary to be done for his patients, that he did. As an instance of this, a few years before his death, he had a case of serious cardiac disease with an unusually distressing symptom. He remembered having seen in some one of his medical journals the report of a similar case successfully treated. He at once began the search over all the old files of his journals and spent nearly two days of his spare time, robbing his sleeping hours, in finding the remedy, which he administered, to the great relief of his patient. Dr. Kenyon was not a man gifted in speech, hence we did not often hear his voice in our discussions, but he was in sympathy with the work of this Institute and of everything which benefited it. His enforced absence for the last five years was a great privation. His fatal cardiac disease first showed grave symptoms about five years ago, I think, when in connection with the usual dyspnœa and angina, he had a purpura hemorrhagica which was very distressing and protracted. He rallied slowly from this attack, but never regained his former strength. Yet he resumed his practice carefully and continued with but short interruptions till within a few weeks of his death. A sin-

gular coincidence was that his two brothers died within two months of him, each of the three from a different affection of the heart.

I wish to add a word in regard to Dr. Ormes. Dr. Allen has spoken of his general professional knowledge; I will speak only of the extent of his practice, and of the fact of his taking up laparotomy after he was forty years of age, which, I think, is remarkable. His operations in this line were very successful. Several years ago he told me he had performed ovariotomy 11 times, 8 times with success, and hysterectomy 4 times. Beginning at the age of 40 years, without consultants, alone in a farming district, we may call this a remarkable record. This work he kept up until the last year of his life, going sometimes 40 miles for consultation and operation. He sent for me in consultation one month before he died, and when I reached *him*, found that he had been 20 miles out of town to an operation, and was going back again the next day. The people of his community regarded Dr. Ormes as a wonderful man, not speaking of him otherwise than as a *homœopathic* physician. He has done a great deal for homœopathy in that section of the country, maintaining it firmly and intelligently all these years. A large number of the physicians from Buffalo attended his funeral. It was a sympathetic concourse of lay and professional men, many coming long distances. He had a wonderful ability in diagnosis, and made some strong points on some of his opponents. points which he was able afterwards to confirm at the post-mortem. He rarely made mistakes in this direction.

J. C. MORGAN, M.D.: Men do not willingly accept the prospect of dying unnoticed by their fellows. This sentiment we should all respect. I feel, therefore, called upon to add my tribute to several of those mentioned here to-day in terms of mourning. I became acquainted with Dr. Kenyon at the time that his son was attending the college in Philadelphia. I was impressed with the honesty with which he addressed himself to me, and though deeply interested in his son's graduation, he requested we should do fairly with him, and do to him only what he deserved. I was, as I say, impressed at that time with the impartial honesty of Dr. Kenyon, and learned to love his principles and consequently to love him. All that I have heard of him since has been of the same kind; the clear, honest-hearted, conscientious physician ever stood forth. We have lost an element of strength in such a man.

When I heard the name of Dr. Clarke mentioned I supposed that he had been President of the Institute when it met at St. Louis in 1867. My mistake arose from the fact that it was then our custom to have an annual Orator, and Dr. Clarke was the Orator at that time. The impression made upon me upon that occasion was decided, and has lasted until the present. I noticed in the first place, his pure complexion, his gentle smile, his manner, bland and at the

same time full of self-respect, his faultless attire, presenting, indeed, the aspect of a perfect gentleman. I have not been privileged to meet him since; yet this impression, short as it was, was so intense that I have remembered him ever since; just as fresh to-day, as though the occurrence were of yesterday. With the correctness of the exterior man, we have the character with which Dr. Talbot has made us acquainted to-day; this is often true.

A word in regard to Dr. Lippe, of whom it is not unseemly to speak as the old war-horse of homœopathy, true Hahnemannian homœopathy. We all have suffered more or less at his hands, we all know what it was to be scored by him. I, for myself, must confess that I like a man to find my weak points and reveal them to me. He in this way compelled me to study, and become a better follower of the great master of our school. At the same time, I am bound to say, that had such influence as his been wholly unbalanced by more liberal and scientific counsels, our school would have failed to realize its true mission, and its present magnificent maturity. Therefore, while I give him praise, I give the same to others, and am glad that counteracting influences have been brought to bear against his exclusive principles from other sides and other men.

Dr. Camp I have never met, but had correspondence with him while I was Chairman of the Committee on Medical Legislation several years ago, and came to realize then that he was a most indefatigable worker, and one of the strongest members of my committee in the performance of the duties assigned him. He did a work in the time that he was a member of that committee that was eminently useful, and traces of that work remain in our reports, which are on record in the TRANSACTIONS of the Institute and in a considerable list of signers to our congressional petition now on file at Washington. I remember him as a young man of the greatest promise to the profession, according to universal testimony of other correspondents. Even now it grieves me to think that he should have withdrawn his powers from the service of the profession, a step which, however, I have no doubt was well advised.

Dr. Zerns was a student while I held the professorship of surgery in Philadelphia, years ago, and I remember him as a marked man in his class. He was an excellent student, graduated with a high average, and became a successful practitioner in other years. His death was a serious grief to all who knew him.

Dr. Brown we all remember; his robust and vigorous frame, repelling any thought of death, his genial smile, and at the same time his aggressive religious and psychological views, so antagonistic to others. He was an earnest, honest man, and we respected him and his views accordingly. He always took in such good part the opposition of others that you felt you liked him better than before. I have no doubt he will receive his reward.

H. M. PAINE, M.D.: My acquaintance with Dr. Randel began forty-five years ago, when we were classmates in the same school. During a greater part of this long period we resided in the same city, and held membership in the same medical societies.

Dr. Randel led a quiet and unobtrusive life. He was thoroughly honest and reliable in all his dealings with his fellow-men. He was not learned, estimating knowledge by book-culture; he was, however, an eminently successful practitioner. He possessed the ability of storing his mind with practical facts gathered from all sources, and thereby held in reserve methods and expedients that proved serviceable in many a critical case in practice.

He had the faculty of acquiring and retaining the confidence, respect and enduring friendship of his patients. They regarded him as a true friend; hence their attachment to him as a physician seldom flagged.

In his medical studies he discarded theoretical questions, and confined his researches to methods having a practical bearing upon the cases he was called upon to treat. He was firm in his convictions and undemonstrative in manner. He was not a visionary enthusiast. Life was a reality with him. He loved its duties, responsibilities and even its sacrifices, and cheerfully endeavored to conscientiously perform his part with fidelity and zeal.

He was suddenly stricken down with an apoplectic attack while applying the forceps in a case of labor, another physician being called in to complete the delivery. It is supposed that his death was caused by Bright's disease, although its presence was not suspected by any of his medical associates.

His genial and modest bearing; his kind and unassuming manner; his untiring devotion to the welfare of his patients, his family and the community in which he lived, are prominent traits of a well-rounded character to which his daily life gave practical illustration.

Dr. Geo. F. Roberts spoke a few earnest words relative to the character and professional services of Dr. Camp, and the memorial service closed with a brief eulogy by Dr. J. Heber Smith.

REPORTS OF BUREAUS

AS PRESENTED IN

SECTIONAL MEETINGS,

INCLUDING

PAPERS AND DISCUSSIONS.

REPORT

OF THE

BUREAU OF MATERIA MEDICA AND GENERAL THERAPEUTICS.

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ZINCUM IN DISEASES OF THE EYE.

By William E. Leonard, M.D., Minneapolis, Minn.

As a student of Materia Medica, rather than a specialist in Ophthalmology, I have attempted, in this paper, to gather together in definite form the uses of Zincum metallicum and its salts in affections of the eyes, and cannot, therefore, claim for this brief summary the least that is new to our homœopathic specialists. If there be anything original, it is the manner of studying the drug, and the comparisons.

The deep action of Zinc upon the cerebro-spinal nervous system necessarily implies some reflex conditions (symptoms) of the optic nerves, symptoms which may afford suggestions of its uses in local affections of the eyes. Several of the provers developed marked sensitiveness to light, weak, dim vision, and lachrymation; in others the appearance of nebulæ and flickering before the eyes, also of green

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* Paper not received.—Editor.

(chiefly, as in *Phos.*), blue and yellow circles in the field of vision completed the visual disturbance, evidently of deep-seated nervous origin. Clinical records, as far as I have been able to search them, are meagre in their confirmation of these decidedly characteristic manifestations of the general nervous action of Zincum.

During the severe neuralgias of Zincum, commonly of deep-seated nervous origin (as well illustrated in Dr. Fahnestock's case of brain fag reported in the *Medical Counselor* for April last), the patient will often develop a dimness of vision amounting to a true paralysis of the retina (Amaurosis), or an amblyopia, both of which may pass away with the attack. The pains about the eyes in such attacks are worse at the root of the nose or at the inner canthi, generally with contracted pupils.

Any affection of the eyes, whether accompanied by cerebral pains or not, manifesting these most characteristic pains at the root of the nose, described "as if it would be pressed into the head," should be promptly relieved by Zincum met. The only clinical reference I find to the use of Zincum in like diseases is in H. C. Angell's treatise (p. 314), where it is mentioned as a proper medicine in acute retinitis albuminurica. Of like cerebral origin is the ptosis of the upper lid, which might suggest Zinc in impending brain-troubles, post diphtheritic paralysis, etc. Zincum has a record also in syphilitic iritis, where the features were the hot-scalding tears and the usual nightly aggravation.

These uses in nervous affections should be improved and enlarged upon by our specialists, for, as a reactive medicine, a "nervinum" in classic old-school language, it is without rival. Zincum in these purely subjective symptoms in general belongs to the same class with Gelsemium, Physostigma, and Phosphorus, but resembles none of them very closely in special action and symptomatology.

Zinc and its salts are most commonly employed for more superficial affections of the eyes, as conjunctivitis, opacities of the cornea, granular lids, pterygium, etc. In conjunctivitis there is much painful soreness about the eyes, worse in the inner canthi and at night, with hyperæmia (worse in right eye), frequent lachrymation and muco-purulent discharge, which (Angell says) is mild, and not very copious. Here it ranks with Mercury, Hepar and Argentum nitricum, after Bell. and Puls. have accomplished all they will. In dacryocystitis the sulphate is in common use, one to two grains to

the ounce of water being the usual solution, together with its internal administration.

Where opacities of the cornea or granular lids result from repeated acute attacks of inflammation, or one severe one, as in ophthalmia neonatorum, Zincum sulph. is the preferable remedy locally or in the lower potencies.

The most brilliant use of Zincum in eye-troubles, is that recorded by Dr. Carroll Dunham, on page 474 of his *Homœopathy the Science of Therapeutics*. In brief, his account of the case is as follows: A farmer, aged 55 years, had for three years a pterygium upon each eye, starting from the inner angle of the eye; this morbid growth, thick, opaque and richly supplied with bloodvessels, extended over the sclerotic, and invaded the cornea with a thick, broad extremity, until it covered more than one-half the pupil, rendering the patient nearly blind; conjunctiva deeply injected, muco-purulent secretion in the morning, aversion to artificial light, reading impossible; within six months the growth had been very rapid. The eyes were very painful in the evening and at night, the pain being *pricking and smarting at the inner angle of the eye*, and apparently deep in the globe; dust greatly aggravated this pain; there was also very severe pressure *at the root of the nose* and across the supra-orbital region, with considerable lachrymation, *especially in the evening*. In July, 1863, he began treatment, with the idea of allaying the irritation in time for an operation for removal in the fall. Under occasional doses of Zincum, the growth disappeared by October, and remained cured. In April number of the *Medical Counselor* for the current year, Dr. J. C. Fahnestock, of Piqua, Ohio, a member of the Institute, also reports a cure of pterygium with Zincum, the main indication being "the itching and burning in the inner angle of the eye."

Other remedies credited with curing pterygium are Sulph., Staph., Chimaphil., and Nux mosch.

Zincum has been employed successfully by oculists for the "intense burning after operations."

Phos., a very similar remedy in many other spheres of action, has burning *spots* on the eyeball. The Zinc patient also sees luminous spots with the burning pain.

SEPIA; ZINCUM—A COMPARISON.

By H. C. Allen, M.D., Ann Arbor, Mich.

The special indications for Sepia and Zincum in nervous and uterine affections are generally in sharp and striking contrast, so that a differentiation is usually not a difficult matter. There are, however, some peculiarities in their general sphere of action that are liable to be confounded. In the brief space of time allotted me I can only hope to point out some of the chief characteristic differences of each remedy in these as well as all other affections.

SEPIA.	ZINCUM.
The most peculiar and uncommon symptom of Sepia is:	The most uncommon symptom of Zincum is:
Deep-seated pain in uterine region; bearing down comes from back to abdomen, causes oppression of breathing; must cross limbs to prevent protrusion of parts.	Boring or burning pain in ovarian region, especially left, entirely relieved only during the menstrual flow. Fidgety feet.
Menses: too early and too profuse; chiefly in morning or most profuse in morning; flow dark but not clotted.	Menses: too early and too profuse; most profuse at night or when walking; lumps of coagulated blood pass away.
Amenorrhœa, usually at puberty; face pale and yellow, or with yellow patches.	Amenorrhœa, later in life; face alternately pale and red.
Menorrhagia; during climacteric or pregnancy—5th or 7th month.	Dysmenorrhœa; violent pains in limbs, in knees; chilliness, relieved by flow.
Leucorrhœa: before the menses; yellow, thick, acrid, worse in the morning, with bearing down pains.	Leucorrhœa: three days before and after; mucus, bloody, causing itching of vulva.
External genitalia extremely sensitive to touch: coition painful.	Sexual mania and masturbation caused by pruritus vulvæ.
Redness, swelling and itching eruptions on the labia minora.	Varicose veins of labia majora, with fidgety feet.
Always feels worse during menstruation.	*Always feels better during menstruation.*

CONCOMITANTS.

SEPIA.	ZINCUM.
Pain pressing outwards.	Pain pressing inwards.
Hæmorrhages; blood dark.	Hæmorrhages; blood light-red.
Apoplexy.	No apoplexy.
Itching; aggravated by scratching.	Itching, lessened, or locality changed or unchanged by scratching.
Pulse frequent and full at night; during day accelerated only by vexation or motion.	Pulse small and frequent in the evening; slower in the morning and during the day.
Drinking beer accelerates the pulse.	Drinking wine accelerates the pulse.
Thirst only during the chill and before and after it.	Thirst during heat, none during chill.
Chill: in evening; from every motion; in open air; external heat is unbearable; deadness of fingers and limbs; feet and ankles as if standing in cold water.	Chill: from *touching anything cold;* (handling cold vegetables); begins after dinner; on approach of a storm; runs down the back; alternates with heat; external with internal warmth.
Sweat increased while eating. Sweat often confined to upper part of body.	Sweat lessened by eating. Sweat often confined to lower part of body.
Great sadness; weeps about real or imaginary sickness, fearful of her health.	Cheerful or changing; low-spirited at noon, lively in evening, or vice versa.
Mental dulness; absent-minded; indifference; imbecility; unconsciousness; avaricious, greedy.	Mental excitability; very sensitive to others talking.
Optical illusions in dark colors.	Optical illusions in light colors.
Eruptions on lower lip.	Eruptions on upper lip.
Coldness in the teeth.	Burning in the teeth.
Urine predominantly dark and offensive; sediment reddish, or white and very adherent.	Urine generally light-colored, not offensive; sediment light-colored, not adherent.
Nasal secretion *watery* or viscid.	Nasal secretion *thick* or viscid.
Expectoration not constant, is loosened especially night and morning and is swallowed.	Expectoration quite constant, particularly in the morning.
Complaints on tip of elbow.	Complaints on patella.
Tongue very foul, but becomes clean at each menstrual period, returning when flow ceases.	Tongue coated at root and dry, hindering talking, in brain diseases.
Cough; constant when child is laid down; child coughs till breath is gone, then coughs and vomits mucus.	Cough after eating sweets, wine, during menses; child puts hands to genitals when coughing.
Ailments from Sulphur, Mercury, or abuse of Cinchona or Tabacum.	Ailments from all preparations of Baryta; from handling cold vegetables.
Remission of complaints in afternoon.	Remission of complaints night, morning and forenoon.
Worse or better after lying down and in bed.	Worse after lying down and in bed.

SEPIA.	ZINCUM.
Better after sufficient sleep, but worse when roused from sleep.	Worse when awaking from sleep.
Better or worse from bodily exertion.	Worse from bodily exertion.
Almost always worse by touch.	Better or worse from touch.
Worse when swallowing.	Better generally when swallowing.
Better while drinking, worse afterwards.	Better while eating, worse afterwards.
Worse or better after meals.	Worse after meals.

BETTER.	WORSE.
In wet weather (Caust.); when alone; after sleep; when rising; from physical exertion; when moving the suffering part; when drawing up diseased limbs; when sitting erect; after breakfast; and from loosening the clothes.	

WORSE.	BETTER.
In dry weather; when in company; when stretching out diseased limb; when sitting bent forward; from blowing the nose; on an empty stomach; when swallowing and eating; from tight clothing; from pressure; from rubbing and scratching.	

ZINCUM AND ITS SALTS IN CEREBRAL AND SPINAL DISEASES.

By S. Lilienthal, M.D., San Francisco, Cal.

Years and years ago a physician consulted me in some cases of scarlatina where several members of the family were prostrated with it. The younger members of the family recovered nicely under the usual treatment, except a little girl, who lay in convulsions and in whom the rash would not come out, till he prescribed Cuprum acet. and success crowned this happy selection. Soon the mother and an older sister, who had assiduously nursed the other ones, came down with it, and though the disease in the sister was also ushered in with convulsions, Cuprum failed to give relief or to bring out the eruption. At that time my advice was requested; Zincum met. brought the rash out. And when asked for the reason of this selection the answer is plain: Cuprum for suppression of eruption or where the eruption fails to come out from nervous erethism in young people who usually enjoyed good health; *Zincum*, want of vitality to bring the rash out, nervously too weak to develop the eruption; and night watching and anxiety certainly brought vital power in that young lady below par.

Here I might stop, for that single case gives us clearly the indication for Zincum in all nervous diseases. *Vital force below par* is the characteristic of this drug, and when we open our homœopathic Bible we learn from its pathogenesis that in just such ailments Hahnemann recommends its use. We read in the fifth volume of the Chronic Diseases, page 324: want of disposition to work and to walk; she thinks she will die; weak memory; constant obtusion in the head; gloominess; sore pain in the head; pain of the hairy scalp, as if there were subcutaneous ulceration, baldness; dryness of eyes; amaurosis with contraction of pupils, paralysis and falling of eyelids; humming in the ears; loose teeth, painfulness of teeth when chewing, sore toothache, salty taste in the mouth; pressure at the stomach with nausea after eating bread, tensive pains in the side of the abdomen; inguinal hernia; constipation; loose and liquid stool, involuntary defecation, itching of anus; retention of urine when he wants to urinate;

involuntary micturition while walking; inability to retain urine when coughing, sneezing or walking; continual erections in the night; too rapid emission of the semen during an embrace; too early menses, painful menstruation, distension of abdomen during menses, leucorrhœa; coryza, cough, tensive pain under sternum; palpitation of the heart with anxiety; irregular spasmodic movements of the heart, shocks of the heart arresting the breathing; intermission of the beats of the heart arresting the breathing; pain in back, drawing pain in the arm of long standing, feeling of dryness of the hands early in the morning, fingers go to sleep, in the morning, when rising; stiffness of the tarsal joint after sitting; painful chilblains on feet, insensibility of body, feeling of coldness in the bones, excrescences; drowsiness in the morning when rising, drowsiness after a meal; sleep full of fancies, frightful dreams, talking and exclaiming while asleep; inclination to perspire in daytime, nightsweats.

A frightful array of morbid states father Hahnemann puts here before us, and we begin to doubt whether any drug should or could be capable to remove so many diverse maladies, till we examine closely into the spirit of the drug, till we individualize the drug from its related ones and then we will discover in every drug a cardinal symptom, around which all the other symptoms naturally group, and here in our Zincum we meet a NEURASTHENIC HYPERÆSTHESIA as the basis of all other symptoms. No wonder such a protean state may show itself anywhere, externally or internally, but a nervous irritability will at the same time prevail, and as the vital force of the sufferer is below par, he or she is not in the right fighting trim to overcome the obstacles to health and long chronic suffering or a fatal issue may be witnessed in cases where the timely use of Zincum might have aided the vis medicatrix naturæ to gain the victory.

Allow me to give you some clear-cut indications from that classical work, "Clinical Materia Medica," for, though we mourn the early departure of a Dunham and Farrington from this world, and though we might feel that their fragmentary lectures ought to have had their own supervision, let us be thankful for what we receive and make the most of it.

Farrington recommends Zincum and its salts for many states of inhibition from weakness of the nervous system. Zincum takes off the oppressive load and the patient is relieved. Thus in zymotic diseases, where as the result of this non-development the brain suffers.

Dysmenorrhœa and ovarian pains are relieved by the menstrual discharge. The neurasthenic patient complains of asthma with great constriction of chest; Zincum removes the spasm and relief follows by expectoration. Restless and fidgety or drowsy with half-closed eyes we may find the little sufferer, where the breaking through of several teeth at once, uses up too much of the life-force of the babe; we find the child pale and cool, no inflammatory symptoms to overcome here, and for this below par we find in Zincum a reliable friend.

It is most astonishing that, despite this nervous weakness, stimulants and even wine are not well borne in cases where Zincum is indicated, and it just proves to us the hyperæsthesia which is combined with this nervous weakness. Zincum will never be useful in genuine inflammation, it will never be indicated in a pure meningitis or cerebritis, though the symptoms may simulate such a state. We know very well that the same cerebral symptoms are found in anæmia as well as in hyperæmia of the brain, and only from the concomitant symptoms, objective as well as subjective, can we make up the diagnosis of the case and of the remedy which covers the totality of the symptoms. Really we do not know a better example to make clear our idea than to differentiate between a genuine meningitis, where Cuprum might act so well, when we met the violent delirium, loquacity on awakening from sleep, convulsions with blueness of face and lips, rotation of eyeballs, frothing at the mouth, etc., not to mention Belladonna or Stramonium, Veratrum viride or Gelsemium; and then to look at the child suffering from a hydrocephaloid following exhausting infantile cholera, and if anything can snatch that child yet from the jaws of death, Zincum is the sheet-anchor and it will do it even in desperate cases. I once passed a shanty when a poor Irish woman stopped my buggy and begged me to do something for her baby, if possible, as her doctor had given up all hope. In the little hovel I saw a wrinkled, emaciated child with hardly a breath of life in it. Just to please the mother I left some powders of Zincum 3d with directions, and then forgot all about it—when a week or so later I passed the same place again, and with heartfelt blessings that mother, the baby in her arms, stopped me again to show me the wonderful improvement which those little powders had produced and saved the life of her child. I never have forgotten that impression, and Zincum holds a high rank in my armamentarium. My friend Prof. Edwin M. Hale led my attention to the cyanide

of Zinc, a salt which deserves our full consideration in just such cases, where life is at such a low ebb and where we fear its extinction at any moment.

Jousset, in his *Matère Médicale*, recommends Zinc in the following nervous affections:

1. *Lypemania*, with intense headache, hallucinations, and excessive emaciation.

2. *Paralysis of the insane;* depression of all the mental faculties; incomplete paralysis.

3. *Locomotor ataxia;* during the early stage of lightning-like pains Zincum may strengthen the affected part of the chord, and thus ward off further mischief.

4. *Hysteria and hypochondriasis.* The mental oscillation, the globus hystericus, the hyperæsthesia of the skin, the transitory blindness and somnambulism of hysteria are also found in Zincum.

5. *Epilepsy*, especially infantile; Herpin cured 28 out of 42 cases with Zincum oxyd., and other physicians record a similar success in suitable cases.

6. *Chorea and neuralgia facialis.*

7. *Headache, especially migraine*, with mental and bodily depression.

The curative action of Zincum may also be witnessed in constipation and diarrhœa, in varicose conditions, in neuralgia and gastralgia, in intermittent fevers, in eczema, impetigo, prurigo, in blepharitis, corneal opacities, granular lids and pterygium, in fact, whenever we find that mental and bodily depression in combination with hyperæsthesia; weakness and irritability go too often hand in hand.

Let this short *resumé* suffice. Zinc salts have been reported for ages as "nervine tonics," promoting the nutrition of the nervous system, and herein all schools are in full accord, and since individualization of the patient, individualization of the diseased state is now promulgated from the rostrum of all medical colleges, let us hope that the light of *similia*, the individualization of the drug, will also dawn upon our so-called adversaries in due time, and the medical millennium will then rejoice every student of medical art and science.

ZINCUM METALLICUM IN OVARIAN DISEASES.

By Corresta T. Canfield, M.D., Chicago, Ill.

The Zinc. met. patient is *irascible* and *impatient*, or is sad, and *weeps* frequently. She despairs of her recovery; is querulous; objects to noise, or the *talking* of *others*. She dislikes work, and cannot or will not even walk.

She frequently complains of her condition to her friends. She suffers from mental depression, with great *weakness* of *memory*. To be brief, there is complete mental and physical exhaustion. Notwithstanding her weakness, she *cannot keep her feet still*. She *suffers from* an *excessively fidgety feeling in her feet, especially after she retires*.

Her *face* may be alternately *pale* and *flushed*, with dark circles around her eyes. She is liable to inflammation of the eyes *during* her menses; eyes are most painful in the *evening* and *at night*. The *inner canthus* especially is red and swollen.

Headache is a frequent accompaniment to her sufferings. The pain may be located in either the *right* or *left side* of *occiput*, near cervical vertebræ. Or, instead of the occipital pain, there is a sharp pressure in a small spot in the forehead *in the evening*. The pain is pressing, as though the *parts would* be *pressed asunder*. Has often a tired sensation in the nucha, particularly *when writing*.

Vertigo, when awaking, as if the head *moved up* and *down*. *Vertigo, with hot flashes*. This symptom suggests the use of Zincum in ovarian troubles, during the climacteric.

Unconscious *starting* and *jerking through her whole body, during sleep; screaming* in her *night-sleep, during* her *menses*. Very restless sleep, with *frightful dreams* which *awaken* her. She has a desire for sleep, and feels unrefreshed in the morning. Falls asleep at her work in the afternoon.

She has great aversion to sweets. Whenever eating sweet things,

an acrid fluid rises in the fauces, producing a *troublesome* scraping in the *larynx*, like heartburn.

There is *violent, loud* and *frequent rumbling* in *abdomen, without pain.* Flatulency, similar to Lycopodium.

Unusual *dryness* of stool, with difficult defecation, *followed* by *involuntary* urination. A paretic condition of sphincter vesicæ, with frequent micturition of *pale yellow* urine. Sometimes we have hæmaturia, or, a discharge of blood *per anum* (vicarious menstruation). A constant desire to urinate, but urine can only be passed while sitting bent backward.

The *ovaries* are in a state of *passive congestion*, giving rise to a *constant, distressing, burning*, or *boring pain* in *either* ovary, but more *especially* in the *left* one. The distress may be a cutting upward in *either ovary.* Pain is *partially relieved by pressure*, and passes off *during menstruation*, but *returns* when *flow ceases.* (The discomfort of an ovarian tumor is relieved by pressure or concussion, when this remedy is indicated.)

The ovarian pains are frequently produced by sexual excesses or masturbation, causing a congestion of ovaries, which finds relief in the *profuse menstruation, characteristic* of this remedy. The *external genital organs* are *extremely sensitive*, with *pruritis vulvæ*, and as a consequence there is irresistible sexual desire at night.

Menstruation is usually profuse, but occasionally we find amenorrhœa. If the flow is excessive, it is *too early* and *too profuse*, with *lumps* of *coagulated blood.* Flow increases *when walking* and *during* the *night.*

In amenorrhœa, or if menses delay, there is great *weakness* in *hands* and *feet*, with cramp in hypochondria and knees, *especially* at *noon, when she is hungry.* She has a sensation of goneness at pit of stomach at 11 A.M., similar to Sul., Nat. carb., Phos., etc.

Although we find that the *ovarian pains are relieved* by the *excessive flow*, there is heaviness and *tremulous weakness* of lower extremities. She trembles as *though chilly*, and is easily frightened. We find a constant drawing in *knees*, as though *they* would be *twisted off.* The pain is so *severe* in her LIMBS that she CANNOT KEEP THEM STILL, but MOVES THEM CONSTANTLY.

An irritating leucorrhœa may appear instead of the menses. The discharge is *white* or *yellowish; thick* and *slimy* mucus, and is worse *after stool*, accompanied with colic.

The so-called "spinal irritation" is often associated with the ovarian sufferings. The pain is felt in region of the last dorsal vertebra, and is *worse* from *sitting* than from *lying down* or *walking*.

Aggravations. All her pains are *worse* at *night, after eating* and *after sleep;* by *getting cold,* by *wine, coffee.* Cham. and Nux vom.

Better from *change* of *position while eating, during menstruation,* from *application* of *heat,* and *partially relieved* by *pressure.*

"Lobelia inflata ameliorates the effects of Zinc." (Teste.)

Other authorities consulted: Hering, Allen, Guernsey, Lilienthal, and Gerstel.

ZINCUM VALERIANICUM IN OVARIAN DISEASES.

By Corresta T. Canfield, M.D., Chicago, Ill.

This salt of Zinc has proved curative in neuralgic dysmenorrhœa. There is pain in *either ovary, accompanied with nausea* and neuralgic headache. Hysterical symptoms appear; cannot sleep; is low-spirited.

Neuralgia of *ovary,* worse *during the menses;* differing from Zinc. met., that in the latter the pain is *relieved* during the menses. Ludlam advises giving it a few days previous to menstrual period.

Case I. A lady, æt. 34, no children, suffered at her menstrual periods with an excruciating, *drawing pain* in left ovary. Pain usually accompanied with *nausea, vomiting* and *headache.* Cured by Zinc. val. 2x.

Case II. A woman, who had syphilis in her younger years, was nearing the climacteric. During her menses experienced a *gnawing, drawing* pain in right ovary. Pain extended through to back, to right of spinal column, just above the sacro-iliac symphisis. Zinc. val. 2x always relieved.

PROVING OF ZINCUM ACETICUM.

By Sarah N. Smith, M.D., New York, N. Y.

May 9th, 1888, I commenced taking the sixth decimal dilution, a dose every three hours—some 30 drops a day.

May 10th.—The left ear set up a great burning and itching that continued all the day, and great itching of scalp on left side of head.

May 11th.—Very soon after taking the first dose, I experienced a peculiar tingling prickling in fingers of left hand and later on, the same feeling in the left foot and in a half hour the whole left side of the body was similarly affected but with increased intensity, and especially the left half of spinal column, and the parts adjacent, accompanied with hot feeling and *light perspiration.* The same prickling and tingling in left side of head with itching of the scalp. The fingers of the right hand were soon affected and experienced the same sensation, but less in degree, also the right foot.

May 12th.—All symptoms less, save burning and itching of left ear which is still very annoying.

May 13th.—Burning and itching of left ear still; and this morning the left hand and lower arm quite red, but not much eruption; more or less itching on left side of head most of the time.

May 14th.—Last evening and this morning experienced a lame, sore feeling in right hypochondrium when attempting to turn in bed; felt the same discomfort in right foot again but not severe. Bowels constipated most of the time during the proving.

May 16th.—I have not taken any of the drug since Sunday, 13th inst., but the itching and burning of left ear still continues.

VERIFICATIONS OF ZINCUM.

By A. M. Cushing, M.D., Springfield, Mass.

I have sent out over nine hundred circulars, one to each of the homœopathic doctors in New England, asking them to send me any provings or verified symptoms of Zincum or its salts. I have also written to several and also made verbal requests and have received fifteen replies, as follows:

One has had but very little experience with the remedy.

One had used it once but the patient died.

One had used it only in such cases as other doctors use it, "jerky legs, fidgety feet, hysterical convulsions."

Two wrote me they would send something but did not.

Two made verbal promises but did not fulfil them.

Two promised to forward any observations made. None came.

Six reported cases or symptoms cured. No provings came.

Dr. Emily Pardee had taken it when her feet were so fidgety she could not sit still, and always with the desired effect. Cured one case of somnambulism; no symptoms given. Had no good results in suppressed eruptions.

Dr. Geo. F. Forbes reported a case of hydrocephalus following gastro-enteritis, treated three weeks by old-school doctors. Patient comatose from narcotic convulsions, had been frequent the past twenty-four hours. Ordered hot water to the head (cold had been used), hot fomentations to the bowels and gave Zinc 3d. The child had been sick three weeks; seemed a hopeless case, but was better in six hours and recovered. At one time Arsenicum 6th was given for debility, but had to return to Zinc to complete the cure. He has treated two similar cases with same remedy, both recovered. He has used the remedy repeatedly, for many of the diseases of the nervous system, particularly in children, and often verified Guernsey's observation.

Patient has sudden oppression at stomach, has to unfasten her dress; also tendency to clonic spasms in children.

Dr. Geo. W. Stearns cured a peculiar headache; pain began in forehead, run to vertex, then down to occiput, then settled on top of head, and while the pain lasted it *seemed intolerable.* The only relief found was by squeezing both hands upon the sides of the head. Cured by Zinc 3x. Has used Valerianate of zinc in a number of cases of prosopalgia with success.

Dr. O. W. Amesbury reports a case of a lady who suffered from chronic occipital headache. Pain at times extending to eyes. Pain makes her feel weak and good-for-nothing. Sensation of heavy weight on top of head; scalp and hair feel sore (bruised feeling), a feeling in occiput as if stunned. Stupid feeling during pain. Pain lasts all day. Zincum 2x cured.

Mr. ———, bartender, on duty from 7 P.M. till 12. Occipital headache; great dulness; indescribable heavy dragging pain in occiput; but what troubled him most was a sensation as if the scalp wrinkled up and kept tightening and remained so. Sometimes it would change and feel as if insects were crawling from occiput to forehead. Scalp felt sore even to touch the hair. Pain always came on when the gas was lighted and continued till he retired. He could not keep still but had to keep moving. Liquors aggravated his symptoms. Zincum 2x cured.

A lady could not go to sleep for three or four hours because of a sensation as if bugs were crawling from her feet to her knees, later to the thighs. This sensation would rouse her from sleep at any time. A careful inspection revealed no bugs. Zinc 2x cured in five days.

Dr. Swain reported a case of post-scarlatinal convulsions in a girl aged eleven; face and abdomen bloated, limbs hard, white and shiny, feet cold and mottled; pain in right eye; pale about the mouth; cheeks and lips red; pupils much dilated in a strong light; thirsty but vomited after drinking; convulsions apparently epileptiform; body much distorted, frothing at mouth and chewing of her tongue. In four hours had sixteen convulsions each followed by vomiting. Three physicians in consultation gave Apis, Bell. and Cuprum. After the last convulsion vomited a large quantity of decomposed blood. Zinc 6x was then given and no more convulsions followed. Later, Bell. and Apis were given and the patient

recovered. (It may be queried which gave the most relief, vomiting of blood, Apis, Bell. or Zinc., and which is entitled to the cure. —Cushing.) The doctors gave the credit to Zinc.

Dr. Newcomb cured with zinc, paralysis of the bladder, with pruritis; leucorrhœa with much itching; pain in the left ovary relieved by the flow; nervous insomnia with intolerable itching of the skin at night without eruption; no itching in day-time; also a headache with nervous, fidgety feet; has to cross the feet to keep them still. Zinc. He thinks the last symptom arises from ovarian trouble.

For myself I have cured with Zinc, sometimes with the 3x, more often with the 200th, severe cases of acute hydrocephalus (these cases had the 3x). Sleeplessness on account of nervous feet, also *severe* sciatica of right side, with nervous legs and feet, was relieved at once and a speedy cure followed.

Case reported by Dr. H. A. Houghton, Charlestown, Mass. Child eight months old, bottle fed, no teeth, had cholera infantum, but under appropriate remedies soon seemed nearly or quite well. Several days later was called to see another child sick with dysentery and found this child had a restless night, and was very much worse. I gave it remedies and the next morning it was so bad the family considered it a hopeless case. It had the following symptoms: Frequent discharges of green mucus from the bowels, little or no fæcal matter, pain and tenesmus; face had a pinched, contracted look; face and head cool; eyes staring, pupils contracted, head thrown back and rolling on the pillow, crying out, starting in its sleep, sleeping with eyes half closed, at times strabismus, throwing its limbs around, urine high colored and passed at long intervals and rarely. Gave Zincum 6th, once an hour. In the evening it was better and it made a good recovery.

Cholera Infantum.—Zincum.—Reported by Dr. L. F. Patton, Malden, Mass., and sent me by Dr. H. A. Houghton, Charlestown, Mass. Child eight months old, bottle-fed. Previous history, strong and well. Symptoms of cholera infantum; next day full invasion of disease with marked hydrocephaloid symptoms from the first. Head cold with slight alternations of heat, the rest of the body fairly warm; continued rolling of the head and eyes, violent crying out during sleep, frequent spasms of the facial muscles, less frequently of the muscles of the extremities. From the full invasion of the disease to the point of crisis the pulse maintained a high rate; tem-

perature 105 to 107 with slight fluctuations. Bromide of Potash 1x, Hellebore 3x, Bell., Bry., together with other well indicated remedies were exhibited with absolutely no results. The child was evidently dying. One physician of large experience said it would not live six hours. The temperature (per rectum) was 107. Pulse impossible to get; comatose. Dr. Houghton recommended Zincum met., which was given in the 12th trituration, and a rapid recovery followed. I would like to call particular attention to the coolness of the head as distinct from the rest of its body, also the localized muscular irritation; spasms of the extremities being conspicuously absent.

Zincum met. in Bronchitis.—Reported by Dr. E. H. Linnell, Norwich, Conn.—Mr. H., aged 70, suffering from bronchial catarrh for two or three weeks under old-school treatment, and no better. Has a very frequent short cough with an abundant easy expectoration of frothy mucus. Cough so much aggravated at night and by recumbent position he has not been able to go to bed for several nights, and even sitting in his chair the cough at night was almost incessant. I gave Zincum met., 30th, in water once in two hours. In two days he was nearly well; has had a good night's rest. One year ago a similar cough was promptly relieved by the same remedy.

Mrs. ——— 34, has measles, slight eruption on neck and upper part of chest; head and face swollen like a case of confluent small-pox; all the same color; brown mahogany color; high fever; hoarse, croupy cough; conscious but convulsed. It was with great difficulty the hands, especially the thumbs could be moved; wrists and arms stiff, and felt numb and dead. I feared I was to record my first death from measles. I gave her Zincum met., 200th, in water, a dose once in fifteen minutes for an hour, when she was decidedly better. I continued the remedy through the day once an hour, and she made a fine recovery. She was dark skinned and had taken Arsenic for an eruption on her face.

DISCUSSION.

M. W. VAN DENBURG, M.D.: I want to say a word in regard to the "fidgety feet" considered as a characteristic symptom in many of the Zinc preparations. I had a case about four months ago, in which this was very marked, together with restlessness at night; the patient "must kick about, could not lie still." Zinc 3x promptly relieved the condition on the first night. Another case in which there was uterine trouble, with obstinate constipation, Zinc 3x promptly relieved. The medicine was sent by mail, in powders of a grain to a grain and a half each, with instructions to take a powder at night, and if she became worse to stop the medicine. The patient however took the medicine for four or five days before reporting, at which time she said that the fidgety feet and restlessness were promptly relieved, but that she had had a diarrhœa ever since the second day. I have had one case of involuntary diarrhœa cured by Zinc 3x, two doses of one-half grain each, two hours apart. The diarrhœa of the previous case stopped as soon as the medicine was discontinued.

T. G. COMSTOCK, M.D.: I would like to inquire of Dr. Gee, if he has had any experience with the Phosphide of zinc in skin diseases?

DR. GEE: No sir.

DR. COMSTOCK: I have had two cases of "shingles," (herpes zoster), which, as you all know, is a nervous disease of spinal origin, in which Phosphide of zinc 3x gave very marked relief to the nervous symptoms. There was pain, itching, and oppression of breathing, and the pains were of a rheumatic character, all over the body, but more especially in the chest, arms and legs. One patient suffered from melancholy and sleeplessness, and the distressing symptoms lasted some three months, before a favorable change set in, with eventually a recovery.

E. M. HALE, M.D.: I was wondering if the Chairman of the Bureau had in mind the genius of the disease of this age when he selected this drug for discussion. It is an age of cerebro-spinal troubles, and Zinc is one of the very best remedies we have for these well-known conditions. It seems to me that the other preparations, especially the newer ones, of Zinc should have more attention paid to them. I was very glad to hear the phosphide mentioned, for it is of all the preparations the one best suited for the present day diseases, and the one which has given me the best satisfaction. Probably the reason is that in this preparation we have pure Phosphorus mixed with the Zinc, and we naturally get the curative effects of both drugs. With the Phosphate it is different, for there is no Phosphorus here, and the Phosphoric acid formed in the combination is nearly all eliminated. Dr. Gee's proving frequently gives us pure Zinc symptoms, and very well marked, and is a good verification of Zinc provings.

The prover of Picrate of zinc told me that he had often used this drug in cases of brain fag, where the symptoms seemed to point to Picric acid and Zinc. Picrate of zinc seems to correspond better with the cerebro-spinal troubles of the present time, which are not of an erethic character; their symptoms are paretic just as the Zinc symptoms are. You know the peculiar torpor which precedes cerebral exhaustion. Now we may use them separately, but curiously enough only two cases under my observation presented a compound of Picric acid and Zincum metallicum.

Another preparation which I have used with success is the Cyanuret. People who suffer from brain hyperæmia or cerebral erethism are not entirely free from some peculiar heart troubles. They complain of symptoms of depression of the circulation, slowness of the pulse, palpitation, fainting and syncope. None of the remedies which I tried gave me any satisfaction until I began to use this one.

I want to call attention to another peculiarity of Zinc, never mentioned before, I think, and that is its power over high temperatures. Now, it was generally supposed until lately that high temperature meant fever, but it is now well-known that the excitation of high temperature may not be fever at all, but be due to a peculiar lesion of the heart-centres, whether paresis or irritation, we do not certainly know. Ten years ago I reported a case of a school-girl, the victim of high-school cramming. She complained of headache one morning, and when I called I found the temperature 105°, but the skin was cold, particularly the head, pulse slow and soft. That attack increased in intensity for seven days, the temperature rising on the seventh day until it reached 108°. Still there was no heat of the skin whatever. She wanted to be in a dark room, did not want to be annoyed or touched, simply said she was sleepy and had headache. I tried Verat. Vir., Acon., Gels., and other remedies which were supposed to correspond to high temperatures. If I had known of the antipyretics of to-day, I suppose I would have tried them. On the seventh day it occurred to me that Zinc might be the remedy, and I gave the sixth trituration in the evening. On calling next morning I found the temperature normal, pulse normal, headache gone, and she wanted to go to school. Now if I ever had a good result from any drug, I had it at that time. Since that time I have always given this remedy in cases of high temperature where no inflammation was to be discovered anywhere.

J. C. Morgan, M.D.: I remember a case of scarlatina where there was a very high temperature with nervous agitation, general tension and irritability of the nervous system, all the symptoms increasing in severity until there was complete collapse and death. I would like to ask Dr. Hale if Zinc would be indicated here.

Dr. Hale: I think possibly it might be. The older members will remember that Dr. Erb, of Dresden, recommended Zinc for all the nervous symptoms of scarlatina, and particularly collapse.

CHARLES MOHR, M.D.: I desire to add a little to the discussion this evening on this important subject. Especially so as I heeded the admonition of the Chairman, that any one with experience with this remedy should appear here and give his testimony. I would like to say, in the first place, that I am very glad to hear Dr. Hale refer to the use of Zinc and some of its salts in the nervous troubles so common at the present time. I would like to say here that you will very frequently find Zinc of some efficacy, and sometimes of considerable service, in those cases where you see Phosphorus outlined, perhaps, or Silica, and where these fail to do much good.

I have never had any experience with the Phosphide of zinc, but provings of Zincum phosphoricum have developed pains in the chest, suggesting a resemblance to the symptoms of herpes zoster or shingles, to which reference has been made.

Let me emphasize what was said in respect to the use of Zinc in the paper of Dr. Allen. I have had some experience in cases of ovarian neuralgia, particularly of the left ovary, occurring in women who have had overwork, either in the way of household duties, in the care of children, or in teachers compelled to make very close mental application; and especially with tenderness along the spinal chord. Also, when walking any distance they become very tired; stooping or descending the stairs will cause the legs to give out, or when they become worse from using the sewing machine. You will find in these cases that the pains are of a boring, burning character, always felt between the menstrual periods, and markedly relieved when the flow sets in.

I would also refer to Zinc in uterine cancer. I have used Zinc here for the purpose of relieving sleeplessness and pain, and especially where with the sleeplessness there is the fidgety feet, looked upon as one of the characteristics of Zinc. Dr. Allen refers to this condition with only one group of symptoms, but in every case of my own in which Zinc was applicable, the fidgety feet has been the symptom directing attention to this drug. It will help in whatever condition you may find it. I do not prescribe on one symptom alone, understand me, but it is these prominent points which lead to the remedy. We should also remember that in zinc smelters, when the effects of zinc are fully developed, reflex excitability of the legs and feet is one of the most marked signs.

In this connection I would call attention to a peculiar case in a maiden lady, 42 years of age. She had some ovarian difficulties, similar to those I have described before, and suffered severely with an obstinate constipation. The stools were quite small, and were passed with considerable pain. This woman sought aid in various directions without finding it. I was consulted and was puzzled to know what to do. I made a digital examination and found a tumor, which I believed involved the rectum, but of what particular variety or character I could not then determine. A growth was certainly there.

She suffered with severe pains in the rectum, and an urging similar to that of Nux vomica—(this drug should always be compared)—together with fidgety feet, preventing sleep at night. On the evening in which I made the above examination, she became so nervous that she begged me relieve her with an hypodermic injection of morphia, but instead of using this narcotic, I put into my syringe a solution of Zincum metallicum 30x, and injected it into the gluteal region. Within a very short time she quieted down, and slept the best part of the night, and was a great deal better next morning. She continued to grow better, and is to-day in the best of health; no other treatment was used. The syringe had not been used for morphine or any similar agent.

C. S. Hoag, M.D.: I want to report a case which was of interest to me, as it was my first case. I went with my preceptor to see a boy of twelve, and found him in a state of collapse. We learned that while suffering with scarlatina, with the eruption fully out, he ran out of doors during his delirium. He was brought back into the house, and the eruption rapidly disappeared. The child was soon seized with convulsions and remained in them for a long time. He was in constant convulsions when we arrived at the house. My preceptor was going to prescribe Cuprum, but as I had just returned from Philadelphia, I had still in my mind the advice given by Prof. Farrington, that in convulsions from repercussion of the eruption in acute eruptive fevers we should give Zinc. met., and this was given in the 3x. The temperature had kept up as high if not higher than when the eruption was present. The child had not been conscious for several hours, and was evidently dying. I was left with the child with directions to give the Zinc for a time, and if no result followed to give Cuprum. I gave the remedy every fifteen minutes, and within two or three hours the convulsions stopped, and the child eventually made a complete recovery.

N. Schneider, M.D.: I believe in the use of Zinc in many of the conditions mentioned here, but it seems to me we should be a little careful in the statements which we make here, because they go down on paper and are reported everywhere. Many of these statements are made thoughtlessly, perhaps, but some of them can hardly have the truth in them. Prof. Mohr says that he made an examination and found a malignant tumor in the abdomen and cured it with one injection of Zinc. metallicum 30th (Dr. Mohr here corrected Dr. Schneider by saying that he found a tumor, but stated that he was not prepared to say what its character was). We should use care in these things notwithstanding, for they do harm to us as a school. If the doctor found something in the rectum, it was probably fæcal matter, and when this was gotten rid of, she got rid of her trouble.

J. C. Morgan, M.D.: I was inquiring of the doctor the location of the tumor, for I thought it might be a retroversion, but from the

information which the doctor gives me I am certain it was not a retroverted uterus.

DR. MOHR: I can tell when I have a fæcal mass to deal with, and if not satisfied by the touch, I look at it. This was not a fæcal mass; at least, I am reasonably certain that it was not. Another reason why I think so is the fact that this woman had been treated for years with suppositories and enemas. I had myself used them, but the symptoms had continued unimproved.

C. W. BUTLER, M.D.: Speaking of tumors reminds me of two which were *produced* indirectly, I think, by the use of Zincum metallicum. In the third year of my practice a lady came to me for treatment. She had been married for six years and was childless. I prescribed Zinc for the symptoms present; cannot recall them in detail now, but there was an ovarian neuralgia, relieved by menstruation. Three months later she became pregnant. Some three or four years later, and under similar circumstances, I was consulted by a lady who had been twelve years married though still childless. After a longer treatment, I think about six months, during which she took a few doses of Zinc, one after each menstrual period, she was markedly relieved of the ovarian neuralgia, and she also became pregnant.

DR. T. G. COMSTOCK: I think Dr. Mohr's supplemental statement explains very much the cure. Dr. Hale has already referred to the advice of Dr. Erb, of Dresden, who suggested the giving of Zinc in cerebral affections of children. For many years past I have prescribed attenuations of Zinc in certain cerebral complications, setting in as complications of either scarlatina or measles, especially where there was a retrocession of the eruption, and the results have been satisfactory, and verifying the experience of Dr. Erb. Dr. Hale mentions antipyrine, which has been used in many cases in our city, and several fatal results have been reported from its use. As far as I know, all the fatal cases were in children. On the other hand, wonderful cures are reported from its use, especially in neuralgia and a variety of nervous ailments. I know personally one family where several members take it in 30-grain doses whenever they "feel badly," and they say that it "always relieves them." The fatal cases from the use of antipyrine that I have mentioned, as happening in St. Louis, were reported to me from other practitioners. In my own experience with antipyrine (which has been limited), I have seen only good results.

DR. HALE: I have very little to say about antipyretics as such, because I do not believe in their use. We have no right, physiologically or morally, to depress the circulation merely for that effect. But I will say that I have never used a remedy for migraine or dysmenorrhœa, or nervous sick headache with as much immediate satisfaction as I have this remedy. I cannot give any better indication than that it is of service in the very worst kind of migraine. After using your usual remedies, and the patient is no better, then give 5

grains of antipyrine, and present relief will undoubtedly occur. I have noticed in these cases a peculiar unbearableness of pain, cannot bear light or noise, or even to be spoken to. Some of these cases reminded me very strongly of Zinc. A few words in regard to the dose, if I may be allowed. I first began with the first decimal trituration, giving it with a good deal of caution, a grain or two in a little water, once an hour or twenty minutes. The results were not satisfactory. Now, I always hold that if you feel obliged to use a drug just as Hahnemann did, so we must use other drugs just as those do who have been successful with them. Then I gave 1-grain doses, and relief came after three or four hours, but we could do as well as that with other drugs. Then I gave three grains, and finally five grains every hour, and I seldom repeat more than twice. If no relief results from the second dose, you may as well drop the medicine.

J. Heber Smith, M.D., being requested to relate his experience with Zinc, expressed regret that he had not come prepared to give this Bureau his notes upon some seventeen cases of poisoning by the oxide of this metal, which came under his care in 1870, in the town of Melrose, Mass., one of which proved fatal. This town had recently adopted for its connecting service-pipe, from the water-mains to the houses, an iron pipe lined with a thin and unstable smearing of zinc, galvanized upon the interior, and in most instances where tested, found to have resisted the high pressure of the head of water only about six months before being worn off (along with particles of iron), to be found in large and dangerous amounts in the ordinary drinking water of this community.

For several months that year, the doctor had been noticing a marked congruity of certain peculiar nervous symptoms in a few of his patients, mostly young children and delicate women, as well as, in several instances, in strong men. One family in particular offered in several of its members, almost a complete picture of this, to him, novel endemic. It was the household of a prominent and wealthy citizen, chairman of the Water Board, thus signally afflicted, and for special reasons which will appear. This gentleman, the Hon. W. P. Sargent, was living high above the town, and had, therefore, constructed a reservoir of great capacity, lined with galvanized iron; this he had connected with a force-pump in his house by seventy feet of one and one-half inch pipe of the same material.

In November, 1870, Mr. Sargent's two daughters were seized with a persistent angina faucium, with ulceration of the pharynx and tonsils. The ulcers were round, sharply defined, with red everted edges; they gradually coalesced. They were filled with light yellow pus, adherent to the base. While convalescing, as was hoped, from her puzzling throat-difficulty, the younger daughter, aged five and one-half years, began to present indications of unusual and alarming derangement of the nervous centres. On waking in the morning, for about ten days, there was entire inability to move the

head and extremities, with general hyperæsthesia. After about an hour of rubbing and attention, this paralytic state would improve sufficiently to permit walking, but with a staggering, uncertain gait, and a tendency to fall to the left. The eyes had an outward cast; the pupils alternately dilated and contracted, but usually dilated; falling of the upper lids, and œdema of the lower; objects appeared elongated, and at times double; expression vacant and apathetic, or irritable; constriction and spasm of the œsophagus during deglutition: accumulation of mucus in the larynx and posterior nares, with obstruction of both nostrils, and with nasal speech. Then, suddenly, for twenty-four hours, every appearance of violent spasmodic croup, with difficult swallowing, and it was feared that the child would choke, so alarming were the indications of threatening local paralysis. Gelsemium quickly relieved these symptoms, and was given in the first decimal dilution, on the evening of the second day, preventing any recurrence thereafter of croup. There continued, however, a train of obstinate conditions wholly resisting treatment for many days, such as eructations; loss of appetite; vomiting of bile or mucus; offensive diarrhœa, alternating with constipation; diminished secretion of urine, and, at one period, suppression for a considerable period. The pulse, wiry and irregular, averaged one hundred and twelve a minute; feverish flushes of heat, with heightening of color from the cervical region upwards and forwards, attended with excitement and crying out to be "fanned," and some thirst; this was a constant feature of the child's evening condition for several weeks. Her sleep was agitated and unrefreshing, with occasional night-sweats. In addition to the flushes at evening, she presented the appearance of utter inability to support the head. Great emaciation; cachectic look; complexion, bluish-white.

On the 15th of December, from the careful comparison and correspondence of the symptoms with our records of zinc-pathogenesy, the doctor concluded to treat the case as one of metallic poisoning, and the metal zinc was believed to be the one in fault. After a careful examination of the water service, and an expert examination, made several days previously, by two of the most reputable chemical experts in Boston, Drs. Charles T. Jackson and James R. Nichols, both of these gentlemen reported on the 23d of December that "the amount of zinc oxide found in the water 'from some unknown source,' submitted to them by Mr. Sargent, was large, and varying in different samples from six to twenty grains to the gallon, and rendering the water, from whatever source, unfit for drinking, and dangerous to health."

This opinion of the chemical experts received the purchased sneers of allopathic savants and medical journals friendly to the galvanized pipe industry, and one prominent Boston paper refused to admit any allusion to these incidents and items of intelligence, because "the Company advertised in its columns."

On the day when the diagnosis became a fixed fact in the doctor's mind, as zinc-poisoning, Mr. Sargent's only son, a very delicate, strumous child of thirteen, was indisposed from what had been supposed a simple cold. On examination, he presented an emaciated feeble appearance, the face wrinkled and of the same blue-white as his younger sister. His pulse was found to average but forty a minute, and was quite intermittent. There was a dry spasmodic cough and slight epigastric tenderness on gentle pressure, but no other signs of local inflammation. The following day he was no better, though found lying upon the sofa dressed. Complained of fleeting pains in the hypogastrium on rising from a recumbent position; continual nausea; entire loss of appetite; the sight or smell of food exciting extreme disgust. Vomited mucus several times the following night. On the fourth morning, vomiting of bile, and indications of extreme nausea, but none of the usual concomitants of gastritis, and he did not complain upon pressure over the epigastrium or abdomen. Pallor around the mouth, and contraction of the upper lip. Only milk was retained, of which an ounce was given at intervals. There was entire absence of pain or complaint to the end. He vomited again that evening, and again the following morning, but passed a quiet night in sleep. The following evening, vomited a brown fluid once like coffee-grounds; pulse, 60; face, a little flushed; no delirium or stupor. The next morning he waked just before light with a call to stool, and after passing about a gill of disorganized blood, sank into a swoon and died before help could arrive.

An autopsy, conducted by several members of this body, atwhich two physicians of the old school were present by courtesy, resulted in the unanimous verdict that death had resulted from heart failure, from zinc-poisoning. The stomach showed indications of inflammation prior to death, being extensively injected, and evidencing traces of sanguinous exhalation.

The following month the little sister, though partially paralyzed in her legs, was fast regaining strength and health, and the following July she was entirely restored. She is now living, and in good health. The entire family suffered in varying degrees, according to previous health and vigor. The symptoms of these, and of some dozen or more in other parts of the town, may be summarized for brevity's sake before closing, from notes taken for a period of about six months, until the obnoxious pipes were removed from the town by order of the authorities, soon after which there was a gradual subsidence of the symptoms attributed to Zinc, and, as might be expected, no such endemic has since reappeared in that community. The homœopathic method of minutely studying drug-action, backed as it had been in this instance by expert analysis, battled with selfish interests, allopathic ridicule and popular ignorance, and the inertia of corporate authority, and drove the galvanized pipes from that

neighborhood forever. There was that amount of fight in one youthful representative of homœopathy in an obscure village, when sure of his ground—against them all. The following presents a summary of the observed symptoms:

Constant, dull, frontal headache; headache extending from the occiput to the eyes; frequent attacks of vertigo, preceded by sharp pressure at the root of the nose, and a sense of drawing together of the eyes as if by a cord, followed immediately by offensive nausea, faintness, and trembling of the hands, as after a wine debauch; sensation of general trembling without trembling, as from poisoning by sulphuric acid; intense pain in the brain, almost maddening, followed by excessive vomiting, attacks coming on suddenly; vomiting of clear mucus, or, more rarely, of bile; vomiting attended with trembling, as after alcoholic poisoning; ptosis; itching and stitching in the inner canthi, with sudden cloudiness of sight; heavy pressure on the eyes; constriction and spasm of the throat; acute darting pains through all the joints, especially the ankles, knees and elbows, with numbness of the adjacent parts, and an exhausted paralyzed sensation in the muscles of the upper arms and thighs, worse on the right side; trembling of the feet and difficulty of raising them, and frequent stumbling; excessive nervous moving about of the feet in bed for hours at night, even when asleep; nightly itching of the soles of the feet, the calves and thighs, perfectly intolerable; general formication, as if covered with lice for weeks, as if under the skin, relieved only by rubbing with the balls of the fingers; deathly sinking at the stomach for hours after eating anything acid; frequent fainting, several times daily, followed by prostration and numbness of different parts of the body; severe stabbing pains in the abdomen, without diarrhœa or constipation, continuing several hours, and returning periodically every seven days, or once in three weeks.

If wine were tried even in minute quantities, as a gentle tonic, it induced nausea, headache, and pressure at the occiput, with a vertiginous feeling out of proportion to the amount drank, confirming the well-known aggravation of symptoms from wine, recorded in the pathogenesis of Zinc.

The principal remedies used, in the order of their importance in all these cases, were Gelsemium, Cimicifuga, Agaricus, Conium, Helleborus and Causticum.

The skin symptoms of these cases interested him greatly, and had been incidental in leading him to the extensive use he had made, in the past fifteen years, of Zincum metallicum, 3x trit. in eczema. He believed it worth any twenty other remedies in this intractable affection, and it is its homœopathicity to eczema that has brought the *unguentum zinci oxidi* of the old school into such wide and enduring favor. You will often meet these cases of eczema following mental shocks or profound nervous exhaustion, in the young and aged

alike, with whom there has been a withdrawing of the vital energies from the muscles to the nerve-centres, simulating a case of chronic *grande mal*, or the non-appearance of an acute exanthem.

He employs Zinc in the beginning of a dangerous invasion of scarlet fever, or other acute exanthem, when there is entire inability, through some unaccountable central nervous weakness, to throw the disease to the surface; the skin is bluish-white, and cool at the extremities, though the axillary temperature may be alarmingly exalted, the pulse vanishing and irregular, or slow and dichrotic; indeed, all the symptoms recognizable are indicative of abdominal and basilar congestion.

Here Zinc is truly homœopathic, and may restore the circulation to the periphery, in connection with such rational adjuvants as the warm bath, hot-pack, the vapor-bath and all other means of inducing free perspiration, in which the true Zinc patient is, if unaided, as though already dead.

One point mentioned by Dr. Allen this evening interested him, namely, the action of Zinc as a dangerous paralyzer of the nerves of the throat: "The expectoration must be swallowed again," was a marked condition in his cases of poisoning. This feature was partially relieved by Causticum. Sambucus is credited with this symptom, as well, likewise, as of inducing and curing the most dangerous laryngismus. These symptoms, likewise, belong to Iodine and its salts, as well as to Spongia, which *is* Iodine!

It is to be regretted that no histological examination followed the necropsy in this instance, but it is to be inferred from the general history of these cases that never again, perhaps, will a more thorough and exhaustive proving of Zinc be made under circumstances permitting prolonged expert examination, and these results, so far as their mere statement, may be almost considered final.

But it is to the physiological interpretation of these reflexes that the student of the future must bend his attention, if he would ever hope to apply this remedy with increased precision to the sick.

H. C. Allen, M.D.: The proving of Dr. Gee will be a valuable addition, as it brings out many of the characteristics of Zinc. Now I want to make a proposition. We are accused, and with some reason, that we are not doing sufficient for our materia medica; not careful enough in our provings, not making them in the right way, etc. This can all be remedied, if every member here will agree to prove one remedy during the coming year. I will be one of fifty to do it. Prove a remedy either on yourself or a friend, with any potency, and next year we will have far more valuable additions than we have had this year.

Sarah N. Smith, M.D.: I was recently called in consultation to see a child who had had convulsions for two or three days. Two other children of the family had died from an apparently similar condi-

tion. Cuprum and other remedies had been given without effect, so Zinc 200 was suggested. This relieved the convulsive attacks, the child remaining free from them for two or three days, but finally died with a generally diseased condition, the nature of which I am not prepared to state. It was not the condition usually seen in these cases.

I got, clearly marked, from Zinc. acet., 6x, several well-developed symptoms, which have not been mentioned here, namely: a burning in the left ear, and an itching on the left side of the scalp, which continues until this day, and it is certainly one month since I stopped the proving. On the second day there was this burning tickling in the tips of the fingers of the left hand, which later was felt in the left foot. After retiring I was kept awake for hours by this same sensation traversing the whole length of the spinal cord, especially on the left side of the cord. Twenty-four hours later it appeared in the fingers of the right hand, and the toes of the corresponding foot, also affecting the spinal cord. With this came the sensation of excessive heat, as if profuse perspiration was about to break forth. There was slight eczema on the right hand, more a roughness than otherwise, but the symptoms were so marked as to be unmistakable. I took the 6x for several days. The bowels were constipated. At first it increased the appetite, which later disappeared, leaving me with a deathly pallor, not yet gone. After taking the drug for a week there came a lame, sore feeling in the right hypochondrium, so that I could scarcely turn in bed. This continued for several days.

C. L. Cleveland, M.D.: I have nothing new to add, but simply to give my testimony in support of the statements already made, that Zinc is of great service in cases of cerebral depression with melancholy due to overwork, as well as anxiety. I have used it in several such cases and can testify to its value.

REPORT

OF THE

BUREAU OF CLINICAL MEDICINE AND SPECIAL THERAPEUTICS.

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CONSIDERATIONS RELATING TO THE TREATMENT OF ENTERIC FEVER.

By W. C. Goodno, M.D., Philadelphia, Pa.

Members of the Institute:

The Chairman of the Bureau of Clinical Medicine and Special Therapeutics, Dr. Gorham of Albany, has been detained at home by the long-continued illness of his wife. Being aware for some time past of his inability to be present at this meeting, he requested me to act as the Chairman of this Bureau and prepare the usual bureau address to the Institute. Having already prepared a paper to be presented with this report, I was unable to afford sufficient time for the preparation of anything additional, and therefore offer you my paper entitled, *Considerations Relating to the Treatment of Enteric Fever.*

If this paper does not present anything novel, surely the frequency, duration and mortality of this disease, lend an interest of no little

importance to any thoughtful practical consideration relating to its treatment.

What can homœopathy do for typhoid fever? is the question I would propound at the opening of this address.

Can you tell me? Certainly, you answer. If there is any one therapeutic question to which reply has been satisfactorily given, it is this one. The homœopathic is successful far beyond any other method in the warfare with this disease. How are you going to prove this assertion? Why, Dr A. says: "I have practiced homœopathically for ten, twenty or thirty years and have lost but three, six or ten cases, as it may be, and I know that my allopathic neighbors have lost more." Dr. A. is honest, he is a good practitioner. But, brethren, such evidence is not worth as much to the scientific world of to-day as the amount of grinding that could be done on the section knife by means of the breath used to utter the words, could it be so utilized. It is worthless; it is positively misleading. Dr. B., better acquainted with the demands of modern science, answers; we have statistics showing its superiority. Where are they? Where may they be found? He refers me, perhaps, to Hahnemann's cases. *But* we have learned that at least very many of Hahnemann's cases were what we now call relapsing fever. In Hahnemann's time the several forms of continued fever were considered one; it remained for Sir William Jenner, of our own day, to differentiate between, to untwist the strands of the continued-fever rope, and clearly define the differences between typhus, typhoid (or enteric) and relapsing fevers. If then, we must put aside Hahnemann's experience, brilliant as it was in its relation to these undifferentiated fevers, and come to later days—what do we discover? Aside from the admirable report of Dr. Martin, of Pittsburgh, who gave an analysis of more than 100 cases occurring in a single epidemic which afflicted that city a few years since, hardly anything which *possesses weight.* The report of Dr. Martin, embracing as it does a single epidemic which ran its course within a few months, only partially satisfies us.

In view of these facts I make bold to say to you that in respect to this common disease—typhoid fever, the homœopathic school cannot satisfy the just demands of those who interrogate us. And yet I am as confident as Dr. A. or Dr. B. that we possess a method of treatment yielding results which are unapproached by any other.

What is the explanation of this state of things? Why should a

school of medicine with thousands of practitioners and half a century of years in which to answer, be nearly silent in response to so important a question? Some will say we lack, or have lacked, hospital facilities. The "ins" stayed in and have kept us out, and as soon as we get a good opportunity we will demonstrate to the world the truth of our claims. There is much truth in this statement, but THE great essential cause to my mind is a weakness growing out of the element of greatest strength which the school possesses—what we may call a principle parasite—*The individualization of cases.* Homœopathy teaches the strictest individualization of each case, and considers symptoms, without reference to those combinations which by reason of their frequent association and common cause receive special names, thus designating the various diseases. *This was a great advance in medicine* and one which the old school has kidnapped so quietly and rocked in its cradle so gently that it has become a part of the new family without its homœopathic mother missing it. If she does not believe her child is lost she has only to go into the highway of allopathic literature where she will find it dividing honor only with the frantic efforts to kill germs. But though allopathy has yet again entered our house and robbed us of one of our greatest treasures and to-day treats disease in the main symptomatically—*she has not thrown aside diseases.* The recognition of such groups of phenomena and their common relationship, is the only ground for comparison between different methods of treatment. This is a period, in medicine, of *analytical study.* We must judge largely of results by the consideration of groups of carefully recorded cases, but we as homœopathists are lacking in this particular. *Individual* cases have been observed in respect to symptomalogical detail as never before, but the study of large collections of cases of the same disease in reference to clinical history and therapeutic application has been neglected. We must come to the front in this matter and show what homœopathy can do for *diseases.* It is thus only that we can convince the medical profession of a claimed superiority. It is what the allopathic doctor demands, what the laity ask for, and that upon which our existence as a school almost depends. Statements of success not supported by such evidence is of little value, for as Sir James Paget says in speaking of a very large class of practitioners, "They seem to have a faculty of reckoning all failures as little and all successes as big. They make their brains like sieves and they

run all the *little* things through and retain all the big ones, which they suppose to be their successes, and a very mischievous heap of rubbish it is that they retain. In conclusion, then, I would urge upon the members of the American Institute of Homœopathy the importance of carefully recording and reporting their cases. We must stop our boasting, talk less and work more.

As a slight contribution to this subject and as a preface to a few remarks upon some features of the therapeutics of this disease, I will report, with slight analysis, two series of one hundred cases each. The *first series* commenced with my first patient after graduation, March 12, 1870, and was completed December 20, 1877, being a period of seven years and eight months, according to years as follows:

	Cases.
1870,	4
1871,	6
1872,	5
1873,	11
1874,	8
1875,	13
1876,	32
1877,	21
Total,	100

It will be observed that during the years 1875, 1876 and 1877, the relative number of cases was large. These three years embraced the "centennial period," which you may remember was marked by an unusually large number of cases of continued fever, in and about Philadelphia. The *second series* extended from December 20, 1877, to January 2, 1888. The number of cases by years is as follows:

	Cases.
1878,	13
1879,	10
1880,	12
1881,	9
1882,	11
1883,	8
1884,	10
1885,	9
1886,	10
1887,	8
Total,	100

Of the first series *two* died. Of the second *three*. Making a mortality of 2½ per cent. of the deaths.

One died of intestinal perforation with its usual sequences. This, a "walking typhoid," was treated in 1871. The diagnosis was uncertain until the occurrence of perforation. Death resulted in thirty-six hours.

Two were lost more immediately from heart-failure; one of these was a young woman who suffered much from bad nursing.

The fourth succumbed rapidly (at the close of the first week) with symptoms of meningitis.

The fifth had hyperpyrexia almost from the first, and died comatose on the eighth day.

About three-fourths of these cases terminated by lysis between the eighteenth and twenty-eighth days. The largest number about the twenty-second or twenty-third day.

Diarrhœa was not often troublesome. Most had from one to six stools in the twenty-four hours commencing with the second week.

Not over 3 per cent. had a degree of diarrhœa exciting alarm. In cases of this character the number of stools in the twenty-four hours varied from twelve to thirty.

Free hemorrhage occurred in only five or six cases; slight bleeding in thirteen.

The number of hemorrhages or bloody stools varied from one to twenty-seven.

One case was ushered in by violent hysterical delirium.

One by symptoms of meningitis.

One was followed in the fifth week by acute mania.

One was accompanied by peritonitis, with symptoms indicating perforation.

One with peritonitis without indications suggesting perforation.

Two developed phlebitis.

Two were followed by local paresis.

Several by feeble digestion and general miserableness.

Temperature.—Very few presented Wunderlich's typical temperature curve. In some, the rise was sudden, to 104° or 105° in twenty-four hours. In a few it was intermitting during the first few days.

Generally there was a close relationship between the height of temperature and the seriousness of the symptoms, although in six or seven, severe cerebral symptoms or signs of heart-failure with the

temperature comparatively low occurred, viz., 102° F., 104° F. to 104.2° was common, especially in young subjects, and without other symptoms of severity; a higher elevation, 105°, if lasting, say more than twenty-four hours, was usually attended by grave symptoms.

The eruption was notable by its absence only five or six times. In most but a few groups of spots over abdomen and lower chest. In a much larger number it was profuse, and extended over the limbs and face in several.

Epistaxis was only occasional, about 10 per cent. Tympanites of *aggravated character* did not occur once.

Bronchitis was almost constant. Lobular consolidation occasional, and hypostatic congestion sufficient to detect, frequent.

Capillary bronchitis was well marked twice. Developments of multiple points of circumscribed periostitis twice, followed by superficial necrosis. Parotitis once.

These two hundred cases were treated medicinally with the following remedies, stated in the order of their frequency of use.

Bry., Rhus., Phos. ac., Bapt., Hyosc., Gelsem., Arsen., Bellad., Mur. ac., Lach., Stram., Tarax., Fluor. ac., Zinc Phosphide.

The food consisted mainly of milk, home-prepared beef tea, and farinaceous gruels; and during convalescence a tardy return to solid food.

Water was given freely, unless the digestive tract was disturbed. If so, restricted to the circumstances of the case.

Stimulants were used but scantily until late in the second series, and then in the form of wine whey, whiskey or brandy; a few times only, champagne. Spongings were employed from one to three or four times in the twenty-four hours. The wet sheet twice. Cold packs to the abdomen several times and a moist cloth covered with oiled silk, or a dry towel in most. The bath twice.

Medicines were prescribed symptomatically, Bry. being preferred during the first week.

Rhus as soon as the *typhoid state* appeared; Bapt. being preferable in some instances. Arsenic after intestinal ulceration was well under way and constitutional deterioration marked. Phos. acid for the diarrhœa. Mur. acid when muscular prostration was the prominent feature, but seldom before the second week. Gelsem. when such failure was early. Hamamelis for the hemorrhages.

Bellad. for the early headache. Tarax. for the pains in the extremities. Fluor. ac. for parotitis, periostitis, etc. Phosphide of Zinc for the sequential nervous feebleness.

I am not aware that so low a mortality has been published by any one, under any method of treatment. The comparatively large number of cases, extending over a period of eighteen years, the disease prevailing but slightly during many years and being epidemic during others, offers a fair collection for the determination of the mortality in private practice and under homœopathic treatment. It might be interesting to note that a third series, commencing with the present year, has not opened so favorably. Within forty-eight hours of each other I lost two cases from intestinal hemorrhage. The first had been ill eleven days with diarrhœa; during the last three days of life, upon the first day, three stools; upon second day, six stools; and upon the last, seven. With the last stool a profuse hemorrhage occurred, amounting perhaps to one pint. Nine others followed within twelve hours. Collapse took place after the first hemorrhage, the temperature falling to below the registration point, 95° F. Death occurred in thirteen hours after the first hemorrhage.

Case II. had been ill nine days; very mild attack, but had been in bed with skilled care from the first. Without warning, a single frightful hemorrhage occurred. I found the patient unconscious, cool, pulseless, and with the pallor of death. Hot bottles and two ounces of brandy hypodermically did no good. But an injection of one and a half pints of warm milk into the median basilic vein led to a return of consciousness and some improvement for a few hours, but death took place from renewal of collapsic symptoms in eight and a half hours after the hemorrhage.

I think we may consider that these cases give to us an approximate idea of what pure, unaided homœopathy can do for typhoid fever. Not that we can form conclusive opinions concerning any special features, from so small a number of cases, as illustrated by the prominence of death from hemorrhage in the early part of my third series referred to. With the exception of the administration of material doses of Quinia Sulph., Antifebrin, and Antipyrin to four cases late in the second series, all were treated strictly upon Hahnemannian principles. As I can perhaps add little or nothing to your knowledge concerning the well-known medicines prescribed, I will

confine myself to the consideration of the question of the use of antipyritic remedies and conclude with a few words in reference to the important matter of diet.

Some homœopathists affirm the lack of necessity for the insertion of such a therapeutic section as the present in the consideration of the treatment of *any* disease. To such we would say that when they can demonstrate that drugs prescribed according to the homœopathic principle are all sufficient for all cases of typhoid fever, such a section as the present may be omitted. Granting, as we do, this principle to be a law, and that drugs perfectly prescribed according to this law, unhindered by opposing forces, are sufficient in all curable diseases to restore the normal state, the clinical fact remains that in many instances we do not prevent a fatal issue.

High temperature sometimes runs riot, asthænia lays low, diarrhœa and hemorrhage prostrate, the nerve-centres fail before the oppressive heat and poisoned blood, and the struggling heart surrenders before its hopeless task.

In the face of such facts as these, away with sophistries. One may believe what he will concerning the efficiency or infallibility of remedies prescribed according to Hahnemann's law—the bold, clinical fact that we do not cure all our cases which seemingly ought to be cured, stares us in the face. If, then, we sometimes, *though rarely*, fail to check the oncoming fatal issue by our homœopathic remedies, is it admissible to *endeavor to control, for the time*, the dangerous symptom or symptoms by the use of drugs physiologically prescribed, to tide over the patient until such time as we can prescribe more successfully? I can see but one answer. The practitioner who does less is unworthy of the name, "physician."

This at once opens in the minds of many the too hasty, frequent and improper use of such agents. With this I am not concerning myself. To fail to teach what one believes, simply because one fears an improper use of that which is taught, borders upon dishonesty; yet such is advocated.

While a factor of great importance, I think, with many others, that the injurious influence of high temperature has been in recent times much exaggerated. This has led to practices of doubtful advisability.

The protracted daily use of antipyritic measures, often without proper regard for the relationship existing between the elevated

temperature and the patient's symptoms, seems most pernicious. An arbitrary temperature-limit has been set up, not the same, however, with all observers; the elevation of the temperature above this limit being the indication for the employment of antipyritic remedies. This rule necessitates the administration of such remedies from a very early period of the disease in most cases. When used from the beginning, constantly, these agents all possess a disturbing and depressing action, especially cardiac, which is prejudicial to a favorable course. The unwisdom of adopting such an arbitrary temperature-limit as a rule of action must become apparent to any one who carefully studies the natural course of the diseases (as we homœopathists are said to do), for in very many cases the temperature rises but very little above the limit of 103° F. or 103.5° F. The general course of the disease being favorable, a temperature exceeding such a limit by a degree or more, even for days, we believe to be often less harmful than constant dosing with powerful depressing drugs. Accepting 102° F. as the limit, it requires quite a stretch of imagination to believe that a temperature of 102.8° does not require antipyresis, while 103° F. does. The same argument applies to any of the standards established. It should not be forgotten that these limits are employed by most observers as indications for the use of antipyretic remedies *without regard to symptoms.*

With a moderate experience and a careful study of the experiences of other observers I conclude that we are to be guided in our selection of this measure more by—

1. The period of the disease.
2. The duration and height of the daily elevation.
3. And perhaps most important—the influence of the temperature upon the other symptoms.

Avoid antipyresis during the early days of typhoid fever. As observed in Philadelphia the temperature during this period averages much higher than you will find stated by writers upon this subject. This early hyper-normal temperature frequently subsides and is followed by a lower than normal temperature (applying the term normal to the average typhoid temperature of the disease). This early rise is due, first, to the primary intoxication, and secondly, to the inflammatory changes in the gut. I have seen in several instances a temperature of 104° to 105° during the first week and not above 103° to 103.5° later. This abnormally high early temperature is

found oftenest in the form of typhoid designated as typho-malarial; the subjects are more apt to be young and of an excitable temperament. While it is always to be considered important, and as likely to be followed by a more aggravated course than when the temperature is lower during the first week, the cases in which this is not so are not at all infrequent. The serious consequences of high temperature are far oftener manifested after the first week and especially after the second week. Now the nervous and muscular tissues, with all others, are altered. The tissue food has deteriorated and lessened, consequently their nutrition is impaired and degeneration is in progress. Now a sudden rise in temperature, or the protraction of an already high temperature does incalculable harm. How long such a degree of elevated temperature shall be allowed to continue depends upon its height and its influence upon the course of the attack, particularly its influence upon the nerve-centres and heart. It is at this time that the accomplished clinician can be of inestimable value to the patient, for it is now that broad knowledge, the watchful eye, the delicate sense of touch and alertness and quickness in scenting danger will detect the early signs of failure and adopt proper means for its relief.

One cannot study the recent literature of typhoid fever without coming to the conclusion that the *dietary* of this disease is a subject of great importance. Very moderate experience confirms this impression. The history of the subject presents at least two well-marked eras, an interval of but a few years separating the early period of *underfeeding* from the prevalent one of *overfeeding*. Since it has been my province to teach practical medicine, I have earnestly opposed the present, to my mind, irrational method. Graves, that eminent Irish clinician, who deserves a place high in fame, did more than any other man to undermine the former plan of semi-starvation and advocate in its stead the more successful one of supplying to the body such an amount and character of nutriment as the altered functions of the body rendered it possible to assimilate. His warmest advocate has been Sir Wm. Jenner, who has passed to the other extreme of *overfeeding*, and his authoritative lead is followed by nearly the whole profession. Of late a tendency to a medium position is observable. There is a strong disposition with very many to "out-Herod Herod." Dietetic and therapeutic methods enunciated by competent observers are seized upon with avidity by the profes-

sional, and even lay mind, and are applied and extended with more zeal than wisdom. Undoubtedly such has been the case in the application of food to continued fevers. It has been proportioned to the *supposed* needs of the patient being based upon the *waste* rather than adapted to his digestive and assimilative ability. Graves, in that magnificent volume of clinical lectures, which every physician should study, says upon page 90, "Although you will not let your patient starve, *do not fall into the opposite extreme. You must take care not to overload the stomach.*" His great disciple, Sir William, did fall into this pit, but he is scrambling out again.

The digestive and assimilative power of the patient can only be determined by a careful review of the case. The question may often be answered only in a practical way, *i.e.*, by a careful observation of the effect of a given article upon the patient. The stools give the most important evidence, but unfortunately too few practitioners examine the dejections regularly. For instance, I saw recently with another physician a case in the second week of the attack. Very frequent stools constituted the most important symptom. The patient had been fed upon milk almost exclusively from the early days. Upon examination of the stools, I found them composed of innumerable minute coagula, so small that, covered, as they were, with darker matter of less consistency, they were almost obscured, and had been undetected. The patient died a few days subsequently with peritonitis, the sequence of intestinal perforation. Even at that time I found, post-mortem, many little masses of undigested milk in the intestines. This is by no means an isolated instance in my own experience.

During the first week the patient's digestive and assimilative powers vary from apparent perfection to an almost total inability. Impaired ability is probably mainly due to the primary influence of the typhoid poison upon the nervous system and secondarily through it upon the digestive apparatus. While catarrhal gastritis is an important factor in many cases, disturbances due to the former are more important, for depressed function resulting from central nervous changes is always difficult to deal with. During this period alterations in the epithelial glands and muscles are generally very slight, and disturbed digestion is due more to impaired nervous power than to changes in the anatomical elements of the stomach.

In the second week, the toxæmia with its nervous results continues,

but structural alterations of the elements are now becoming marked. The cell, struggling under the depressing influence of the typhoid poison, is but imperfectly appropriating and transforming the impaired pabulum which is offered it, consequently what little it takes remains, much of it, within the cell imperfectly assimilated and therefore a burden. Excretion of its products is correspondingly imperfect. It is in this stage of the disease, and later, when the structural alterations are profound, and prostration (adynamia) is excessive, that we are advised to *pour in the food*—2 to 3 quarts of raw milk, 1 to 2 pints of beef tea, and perhaps a little farinaceous gruel with (often) 6 to 12 ounces of whiskey or brandy are given within the 24 hours. Add to these conditions of the digestive organs and nervous system—*the blood*, struggling under its oppressive load of imperfectly elaborated matter, the specific poison causing the fever, and the largely increased amount of irritative excrementitious matter—add to these the crippled glandular organs imperfectly elaborating and depurating; the general tissue elements, their integrity impaired and their avenues of ingress and egress perhaps choked by a vandal horde which interferes with their feeding and appropriates their oxygen, and you have some of the reasons why the processes of life should not be still further disturbed by the administration of quantities of food often larger than the normal system can properly dispose of.

Discussion.

T. G. Comstock, M.D.: I am very much pleased with the paper, which is replete with good common sense combined with excellent experience. I would like to inquire as to the results in the case of "walking typhus," and also the case of parotitis reported as a complication of typhoid fever. I regard parotitis, when it sets in as a complication of typhoid fever, as a very dangerous affection, and in my experience the prognosis in such cases is always grave.

W. C. Goodno, M.D.: The case of walking typhoid fever died from peritonitis following perforation of the bowel. I have only had one case of parotitis in my own practice, and two others in consultation. One of the latter died; the other was a serious case, and barely escaped with life. I regard it as a very serious complication. I have used antipyretics in only two or three of my own cases, but have seen several others with other practitioners where I have suggested their use, and in most of the cases the result has been admir-

able. Antifebrine was used exclusively. As stated in the paper, I do not believe in the use of these agents in the early stages of typhoid fever, as is so commonly done. My own use of them has been limited to dangerous high temperature, coming on in the second or third week. One case was seen in consultation, in which during the fifth week of the disease the temperature suddenly mounted to 107° in the axilla, and in which we utterly failed with cold, employed with sponges and the pack, but were immediately successful in reducing the temperature with small doses of antifebrine. The temperature persisted in its tendency to rise for ten days, during which time we continued the use of the antifebrine, in 3 to 5 grain doses. There was tetanic rigidity, which was relieved each time that the temperature was reduced to a safe limit.

J. W. Dowling, M.D.: One point in Dr. Goodno's paper was of interest to me, because the same question had been recently discussed in another society of physicians where I was present. It was in regard to the typical temperature curve described by authors. The doctor says it is a rare thing in his experience to see the typical curve of fever as laid down by Wunderlich, by which he claims to be able to diagnose the disease. This was also the experience of the physicians in the society referred to. How many here are in the habit of observing this typical form, the rise of 2° at night and falling 1° in the morning, of the first week; the continuous range of the second week; the morning remission, with the evening temperature of the second, during the third week; the intermittent character of the fever of the fourth week? My own conclusion is that this temperature curve varies in different parts of this country and in different countries. The statements of Wunderlich, Murchison, and others cannot be doubted, but certainly the typical form of typhoid fever of the old country does not exist on this side, if we take the temperature curve into consideration. The doctor has only seen one case of parotitis as a complication of typhoid in 200 cases. In a practice of thirty years I myself have only seen one case. Have you noticed in your mild fever cases that hemorrhage was more common than in the severe cases? The doctor spoke also of perforation and septic peritonitis as a result. I had a remarkable case of death from hemorrhage not long ago. It was throughout as favorable as any case I had ever treated; there was no doubt of the diagnosis, all the physical signs being present; during the whole course of the disease the patient sat up every day, and shaved himself every other day. The course was as we usually find it in favorable cases; the patient was apparently recovering very nicely, when, on the twenty-fifth day, he became suddenly worse and died. Erosion of a bloodvessel with hemorrhage into the intestinal canal was the cause of death. This is not an uncommon cause of death in fatal cases where the disease had apparently been mild in its course. Another unfortunate

case was that of a strong, healthy man, who was taken down with typhoid, and went through the disease nicely; at the end of six weeks he travelled 200 miles to his home. Arriving there, his appetite was ravenous; the family were at dinner; he joined them in a meal of corned-beef and cabbage. That evening there was a rupture of the intestinal canal, and on the second day following he died of septic peritonitis. I think we should caution our patients, for weeks longer possibly than we usually do, to be guarded in their mode of diet, exercise, and in assuming unnatural or strained positions. I had one patient who died in the water-closet while straining at stool.

Dr. Goodno: In my cases of hemorrhage the condition had been pretty good. In both of the cases reported, the general condition was so; I did not expect a fatal issue at all.

Charles Mohr, M.D.: I wish to say a word in answer to Dr. Dowling's question, which is a very pertinent one, in regard to the variations of the temperature-curve of typhoid fever. I reported a series of forty-six cases, a few years ago, in which I brought out this point very strongly, that the temperature during the first week was of such a character that it made the diagnosis of typhoid fever, when looking upon the temperature-curve alone, as very uncertain. It was more like ordinary malarial fever. Quite recently in my own practice, and in the practice of other physicians, I have seen a few cases in which the temperature was extraordinarily high from the beginning. I remember one case in consultation; the patient, a young girl, had been ailing in a trifling degree for a few days, and had taken a purgative for the condition. A few days later, she was taken so sick she could not leave the bed; temperature, 105°. It remained at this high point with deep abdominal pains, giving the appearance of peritoneal or pelvic inflammation. The case went on to development, and proved to be typhoid fever, showing the characteristic roseola on the ninth day, one day before death. I believe that these differences in the temperature of typhoid fever are due to climatic and other changes, depending on the mode of life and the habits of the people, and perhaps also due to the peculiar character of certain epidemics. We read in the history of typhoid fever that, in an epidemic in Paris with all the characteristics of the disease, there was a subnormal temperature from the beginning of the illness until death. This shows, I think, conclusively that temperature-changes are dependent upon climate, surrounding circumstances, and the peculiar character of the epidemics.

A word or two about certain features of the paper. I never had, in my own practice, a single case of parotitis as a complication. I saw one case, however, with the late Dr. Farrington, in which a fatal issue was the result.

In respect to delirium in typhoid fever, I want to call attention to the fact that I always dread either a very violent form of delirium,

or a persistent delirium, continuing day and night, because I have never seen such cases recover.

Then, again, I always dread to see a peculiar hopefulness or happiness of mind in this disease. I have seen one very marked case of this kind, in which the patient, whenever I asked how he felt, would reply "perfectly happy," while a smile illuminated his wasting face, but death was the result. In speaking of this case to Dr. Farrington, he remarked that he had also witnessed this, and considered it a grave symptom, even when the case seemed of the ordinary type. No marked variation of temperature, no marked intestinal lesion, no lowering of the vital forces and threatened heart-failure were pronounced in the case just alluded to.

Another thing I want to impress upon you, is to watch your patients after convalescence, in respect to the diet. I treated a case last summer, convalescent on the twenty-fifth day. Nine days after, I was called to see him, and found that on the previous evening he had eaten some grapes, swallowing a few seeds. This immediately produced a relapse, with which he came near dying, and convalescence was not re-established until the thirty-sixth day of the second attack.

Dr. Dowling: I cannot account for the variations in the temperature-curve in this country. Once in a while I get this regular curve as described by authorities, but it is a rare thing. I do not remember having seen anything in the text-books which explains it. I should like the experience of men who have watched a series of cases, such as reported here to-night. I do not think the typical temperature is common in this country.

J. C. Morgan, M.D.: I wish, in the first place, to applaud with all my heart the scholarly paper of the chairman. With this, and the earlier paper of Dr. Martin, of Pittsburgh, to which he referred, we have a fair array of statistics to begin with, as to typhoid fevers. I approve of the practice laid down in the main, and feel grateful to the workers of the Institute at this meeting, including the author, for a clue to two remedies for hyperpyrexia. This condition I dread most of all in acute diseases. We hear little said of it, for it is rare, but when it happens, it is very often the prelude to a fatal issue. Antifebrine was mentioned in the paper of the chairman, given in small doses, meaning two to three grains. I have applied to Boericke & Tafel for a trituration of this drug, so that experiments can be made with it in this form, for I believe that if it is a specific at all, it should act in much smaller doses. I do not want to dogmatize in this question of dose, but I do want to get at the minimum curative dose in all cases. Thus I have found in apoplectiform attacks that the 3x of Potassium bromide is perfectly efficient, and I expect Antifebrine, in like doses, to do its own proper work.

In regard to the temperature-curve, my experience has been ab-

normal throughout. I have observed in a recent number of a homœopathic journal a mention of typhoid fever in which the temperature-curve was alluded to as present in the case, and deciding the diagnosis. I am compelled to believe that, had it been absent, this patient might still have been laboring under typhoid fever. I, however, also believe that deviation from the typical curve is far less likely to occur with the old-school than in our own. We claim, and justly, I think, to be able to abort the disease in its incipient stage; fortunately for the patients, but unfortunately for the confirmation of scientific records. This will, however, favor our school in the future.

In my early practice in the old school, I think I got the elements of the orthodox chart. But since I began to practice homœopathy, I have rarely seen this typical form. In thirty-four years I have not seen more than six cases which would justify the diagnosis as given by the chairman in his paper. Now, why is this? I have seen scores, I might say hundreds of cases, which, in my early practice, I would have said were going to be typhoid fever, yet I have seen these same cases recover in three to four days. I cannot announce them as typhoid fever, but I have my own opinion. I have seen articles in print criticizing certain physicians for claiming that given cases were typhoid fever, in which it was asserted that such could not be the fact, unless the temperature-curve and the typical course and duration were present; and particularly that if it did not last so long, it was not typhoid. Yet, as I say, I have seen scores of cases in which I have had every reason to expect that they would be typhoid cases according to their beginning. I wish to make this point, and to take exception to the admissions of the paper in this particular, namely, that such statistics are indispensable to enable us to come before the medical public, and prove our superiority; I claim that if we do not have the cases, it is on account of our superiority in the methods of our early treatment. If we do not have these cases, we do not lose them, and the doctor who loses no cases ought to be the one summoned for the treatment of suspected cases of typhoid fever. The occurrence of typhoid fever without the true temperature-curve, course and duration in our practice is a happy fact, and a marked point of superiority. An irrefragable diagnosis is ever very satisfactory to our scientific mind, and I crave it, as all do. For some reasons, even our own experiences have been different, one from another. I have no statistics like those of Dr. Martin and Dr. Goodno, and no series of cases to report. I have seen some typical cases in consultation, and I remember one, which seemed to call for Bryonia, which was given; but my back was scarcely turned when some other drugs were given with it, and the patient very soon afterwards died with hemorrhage from the bowels. I think that that patient went to his grave because his doctor could not let well

alone. We have here that disposition to supersede and coerce nature which is present in the old school. We, too, often must be meddling, putting in this and that; we cannot be satisfied with the salutary working of the only curative force in the wide universe, the *vis medicatrix naturæ*. Give a clue to nature where she needs it, direct her aright, and then trust her—let her alone—let the *vis medicatrix* carry it on to the end, and we will save ourselves the experience of the doctor in the country, to whom I have alluded.

Another thing which shows our superiority, is analogous to what I have just presented. Dr. Dudley, in examining the records of the Health office in Philadelphia, some years ago, found that in the treatment of acute diseases, homœopathic physicians did not experience, in proportion to their number, anything like an equal death-rate with their brethren of the other school. Similar statistics were obtained in other cities, viz., New York, Brooklyn, Newark, N. J., and Boston. They showed that our physicians lost a much smaller percentage of their cases than their allopathic neighbors. Now there may be charges of bragging, when we talk of cures, but there can be no such charge when we talk of deaths. When these are compared together, that is a form of testimony which should be regarded with consideration, and it has the further merit of being statistical, too.

W. J. Martin, M.D.: It has been asserted that the reason we do not see this temperature-curve is because of our therapeutics which undoubtedly exert a controlling influence over the course of the disease, and, as a consequence, over the temperature-curve.

R. F. Tousley, M.D.: I think one explanation of this curve is the fact that it was observed in those who were not under treatment. It is reasonable to suppose that, if we can modify the symptoms, we can modify the temperature also.

Chas. Mohr, M.D.: I believe all that has been said in reference to the effect of the homœopathic remedy upon the course of disease and especially upon the course of typhoid fever. I can readily see that if we have a number of cases under observation, making thermometric records twice daily, and find that during the first week of the disease the typical rise and fall is present, and we administer our homœopathic remedies, as indicated, no matter what they may be, and the course of the temperature during the second, third and fourth weeks, does not follow the typical curve, we may conclude that our remedies have done some curative work. But this does not explain those cases of typhoid fever of which I spoke before, in which there is an abnormal rise of temperature during the first week. In such cases, even at your first visit, you may find it 105° or higher, before any medicine has been given. The future development of these cases shows them to be typhoid fever, for such cases have died and the post-mortem examination has revealed the characteristic enteric

lesions. I believe there is such a condition of climate or "malaria," that enteric fever becomes mixed in its character and assumes a malarial type, but the results prove that it is not malarial fever alone.

DR. PARSONS: I have often found the lowest temperature at midday.

G. W. BOWEN, M.D.: I have taken for many years the journals of foreign countries, and have carefully examined their description of typhoid fever, and found it radically different from that of our own country.

The disease they have in England seems to be more of a typhus type. I have studied the matter very carefully and find that the type in our cities is often of this typhus type. I have seen it several times, but have never seen it in small places. Years ago, however, we had a distinct type of fever. The old-school physicians lost many cases, and claimed that it was real typhoid fever. Twenty years ago we had conditions which were more like the descriptions of typhoid fever, but since that time they have been of the typho-malarial type.

I have not seen a case of typhoid fever in my locality for several years. The fevers of Philadelphia are radically different from those which prevail in my section. A few miles from our city we have immense swamp lands which modify the type of disease.

We see a fever which does not last more than ten days to three weeks. Those we had formerly began with pains in limbs, extreme weariness, drowsiness lasting for three days, and then could not sleep, petechial spots, indicative of typhoid nature. I know there is a difference in the disease, and I wish it could be taken into consideration. The disease at present is more of the typho-malarial type.

D. A. MCLACHLAN, M.D.: It seems to me that we are wrong in trying to account for the absence of this curve from any *one* cause; one ascribes it to treatment, another to something else. Treatment does modify. I have observed a large number of cases, and my invariable rule is to watch the temperature closely. I have noticed that where the patients were strong and vigorous, I might expect a sudden rise in the temperature, but where they were naturally feeble, or run down from any cause, the characteristic curve was more apt to be present.

We have in Michigan some contamination from malaria as in other states. We seldom find uncomplicated cases; in these mixed cases, for the purpose of experiment, I have given quinine, and after that have witnessed the more characteristic temperature-curve of typhoid fever.

I have seen one case of parotitis in a lady, 65 years of age, a small, delicate woman, and the case a protracted one of six weeks duration followed by recovery. The parotitis was on both sides, and a slight amount of pus in one side was discharged with the lancet. Changes in the curve are certainly often due to treatment. I am sorry that

Dr. Hughes, who put on record cases of aborted typhoid fever, afterwards withdrew the assertion, saying they were probably not true typhoid cases. I believe we have numerous cases which are aborted or modified in the early stages by treatment. We should hold our position in this matter, for we are as capable of drawing correct conclusions as the old school. We should stand to our diagnosis and claim the benefit as due to our treatment, as it must be.

BUSHROD W. JAMES, M.D.: I am satisfied that homœopathic medicines do modify many cases of typhoid fever in the early stage. I have frequently seen them cut short, and am satisfied that many of the cases, if they had gone on without remedy, would have been tedious typhoid fever cases. If patients would but follow their medical attendants' directions, which they often will not do, the results in cutting short or modifying attacks would be still better, for medicines will modify this disease. I had one peculiar case lately where in the middle part of the day the temperature was lowest, highest in the morning, falling in the evening. That patient in two weeks became alarmed and desired a consulting physician, who said it was a case of aborted typhoid fever. The case ran along with mild typhoid-fever symptoms, but on account of the high temperature I would not let it get up; finally it fell into the other physician's hands altogether after the end of the third week. The temperature when the case passed from my hands was 104° in the morning and 103° at night. I afterwards learned that the patient was allowed to get up and suffered a relapse of weeks' duration, but eventually recovered. Individual temperament, atmospheric conditions, malarial poisonings and other modifying causes have a great influence on the course and gravity of the typhoid disease.

A. R. WRIGHT, M.D.: In the city of Buffalo there is not near so much typhoid fever as within two miles of where we are sitting. I learn that there is a great deal of typhoid fever in the surrounding country, while, as I said, we have very little in the city, though in the extensive suburbs there are the favorable conditions for its development. In Chautauqua County they have numerous cases of typhoid fever, even on the hills where we would not expect to find it. For thirty years there has not been an epidemic in our city. I do not think I have had more than 300 cases in that time; I am sure ten a year would cover the average. I never had a case of parotitis; have seen only one patient die from perforation of the bowels; have had four cases of hemorrhage of the bowels. I have had my share of cases, I think, and the above would be my limit.

In regard to the temperature, it has been my observation that the typical curve of the authorities is only seen in the first week. My aim in treatment is to reduce the violence of the invasion of the disease as much as possible in the first week, and at the crisis begin with stimulants.

LOCOMOTOR ATAXY.—A CLINICAL CASE.

By Clarence Willard Butler, M.D., Montclair, N. J.

Mr. A. C. B———, the patient, is 57 years of age, dark complexion, medium height, and of rather full habit, but without excessive adipose. He retired from an active and successful business life fourteen or fifteen years ago. For the last few years he has had a good deal of care and anxiety over financial matters, from all of which he has recently been entirely relieved, however. His father suffered from gout; but aside from this the meagre family history which he is enabled to furnish is exceptionally good. Two of his sons have developed epileptiform convulsions, reflex from peripheral irritation. (Hæmorrhoids in one, jealousy and probably masturbation in another.) Both are well now, however; cured by the homœopathic remedy.

Mr. B——— has always been a very healthy man. His habits are and have always been correct. Has never had venereal disease; is abstemious as to the use of alcoholics, and moderate in the use of tobacco (smoking).

In 1868 a railway car in which he sat was precipitated, with a faulty bridge, into a ravine, and he suffered some severe cuts about the head and face, and was much bruised, but broke no bones, and was not conscious of any spinal injury, nor do I think he suffered any.

He has had no severe illnesses. Twice during the last two years I have treated him through attacks of gout, but neither was severe, and both yielded promptly to medication. For the last four years he has been troubled with frequent calls to urinate. This condition is worse at night, is wholly painless, and examinations of his urine have given no signs of kidney disease. Medication has relieved, but not cured him. The beginning of his present trouble he refers to September of 1887. At that time, on attempting to rise one morn-

ing, he found himself very dizzy; he succeeded in dressing, however, and ate a good breakfast. Shortly after eating it he vomited suddenly, without nausea and without effort. His vertigo pursued him throughout the day, but under *Conium* it disappeared. Once or twice afterward, within the next two months, he had similar attacks, but less severe. About this time he noticed that he became tired very easily while taking his usual exercise (walking), and in his frequent visits to the bath-room at night he was uncertain in his movements in the darkness, and was obliged to make a light in order to go safely. In spite of these symptoms, however, he did not consult a physician until the middle of December. When called to see him at that time the evidences of spinal disease were pronounced, and in spite of my best care he grew very rapidly worse until February 5th, 1888, when the following grave conditions presented themselves:

Inability to walk from loss of co-ordinating power over his legs; the ataxic gait, which was plainly noticeable in December, having increased to this extent. The patellar and ankle tendon reflexes are entirely lost. On attempting to stand with his eyes closed he sways, and falls at once unless supported. When his legs are placed in different positions he is unable to tell where they are unless he can see them, and any endeavor to place either leg in a required position is awkwardly and imperfectly made, and is usually unsuccessful, while all involuntary movements of the legs present the exaggerated impulse and imperfect control characteristic of his malady. My notes of the case mention areas of cutaneous anæsthesia, but, unfortunately, do not locate them. The upper extremities are unaffected. At no time has he suffered from any visual complication, and to me an interesting and unusual feature of the case is the entire absence of paræsthesiac manifestations referable to the soles of the feet, sensation in these having been normal throughout. No soreness or tenderness of any portion of the spine. Inquiry respecting his sexual appetite shows that he has had but little passion for a number of years, and has considered himself "out by age."

He presents a perfect history of the "lightning-like pains" which have pursued him from time to time irregularly for two or three years. He has supposed them to be rheumatic in their character, and dosed himself domestically for them. His pulse is 100, regular, full, and quick. Temperature normal. His bowels are obstinately

constipated, though the stool when evacuated does not present any unnatural appearance. The urinary trouble which I have already mentioned, frequency of micturition, has largely, but not entirely disappeared. Those symptoms which trouble him most are great weakness and debility, and this weakness is especially severe in the legs, particularly in the calves of the legs, where it is associated with a sensation of *stiffness* and soreness. The sensations in the calves of the legs are the most frequently complained of, and seem the most annoying to the patient of all his uncomfortablenesses. He is much annoyed by a sensation as of a belt tightly drawn around the abdomen just above umbilicus; the same sensation is felt at times about the chest below the nipple line. This latter is not constant, however, and never severe, while the former is always present and often painfully severe.

Insomnia. On retiring at 9 or 9.30 P.M. he goes to sleep and sleeps until 11.30 or 12 o'clock, when he awakens usually with a heavy, dull, hard pain low in the abdomen. This continues until toward daylight, when it gradually wears away. It is accompanied with much flatulence, with noisy eructations and dejections of tasteless and odorless gas, the escape of which affords temporary relief to his pains. These pains do not appear in the day-time. During the day he is sleepy, and succeeds in getting some rest (sleep), but the whole amount of his sleep will not average more than five hours out of the twenty-four. He presents, in addition to these especially troublesome symptoms, many others. Mentally he evidences no loss of strength. He is taciturn, almost apathetic, and at the same time, in spite of himself, his thoughts run upon committing suicide as "the easiest way out" of his troubles. His appetite is lost and he has no taste; is not especially thirsty. His tongue is red, *dry*, and divided by numerous little cracks into small irregular squares. He has little or no headache, but suffers at times with a sense of confusion. During sleep his face is puffed and red, and his breathing deep and noisy. All his symptoms are worse at night.

Many sensations of formication, numbness, etc., are experienced in his legs, principally in the calves and thighs. During the past six weeks he has taken at various times Anac., Sulph., Gelsem., and Hyos., all without benefit, though they were seemingly indicated. On this day, satisfied that Anac., his last medicament, was doing him no good, I made my examination for a new prescription, and elicited

the symptoms already enumerated. The mental condition, the noisy evacuations of gas with relief of his symptoms therefrom, the extreme weakness, and *sensation* of great debility, called my attention to Argent. nit. A further study of this drug reveals the following similar symptoms:

Taciturnity; apathy; suicidal tendency.

Staggering gait in the dark.

Dull hearing, with ringing in the ears.

Great debility of the legs.

Dry tongue.

Anorexia—taste lost.

Noisy ejections of tasteless and odorless gases, with relief of his symptoms therefrom.

Frequent urination.

Sensation of constriction of chest and abdomen, as if tightly bound.

Impotence (?).

Stiffness (rigidity) of calves.

Great weakness and debility of calves.

Great general weakness and debility.

Sleeplessness; drowsy during the day.

Many dreams, with restless sleep.

Sensation of heaviness in the abdomen.

Many symptoms of weakness of the legs.

Regarding Argen. nit. as the most similar remedy from this study of it in relation to the case, I gave one dose of it in a high potency (cm.—H. S. Johnstone) dry on my patient's tongue and Sac. lac. *ad lib.*

February 6th.—No change.

February 7th.—Possibly a little more sleep and less abdominal pain; otherwise no change.

February 8th.—Undoubted improvement in respect of all his sufferings. He slept until 1.30 A.M., again about two hours, and his abdominal pains were less. Has slept nearly all the morning. Bowels moved without aid. He feels encouraged; is sure the medicine is helping him. A detail of the quotidian history of this case for the next three months would be tedious and profitless. From the 8th day of February his improvement was steady and uninterrupted until March 16th. On that date he presented the following condition:

Mentally, cheerful and hopeful. Suicidal thoughts all gone. He

walks all over the house, going down stairs twice daily to his meals. The gait is much better though still presenting the peculiar ataxic character in some degree. Tendon reflexes unchanged. His sense of debility has largely disappeared. He tires easily, but sleeps well, all the nightly pains having disappeared. The sensation of constriction about the abdomen is still present but less troublesome. The old symptom of frequent urination has returned and is very annoying; also he has had some of the rheumatic pains—the "fulgurant pains"—in his legs in one or two occasions. It is noticeable that the sleeplessness, the severe abdominal pains, and the noisy evacuation of gas, which were among the last symptoms to appear before the February prescription, were those which disappeared first and most completely after that prescription.

Improvement not having ceased, and especially as most gratifying indications of the favorable action of the remedy were present, viz., the disappearance of symptoms in inverse order of their appearance, and the return of symptoms which had once been present in the case and which had disappeared as the patient grew worse, I did not change the remedy nor did I repeat the dose. On the 7th day of April a careful examination of my patient's symptoms in detail showed that improvement had ceased and certain of his symptoms had grown worse, notably the sense of constriction about the abdomen. I deemed it therefore wise to repeat the remedy, no other being indicated, and I gave it in the same potency in water, a spoonful hourly until twelve doses were taken, and then stopped. Improvement manifested itself again within twenty-four hours of this time and continued uninterruptedly until May 12th, when an examination revealed the fact that Mr. B.——— could now stand and walk with his eyes closed, that the patellar reflexes had returned (ankle not examined), that no sensations of pain, no symptoms of his former disease were left except some muscular weakness. He considered himself well, and I discharged him from my further care.

This case I have presented because I regard it as interesting and instructive for several reasons.

Etiologically because it adds another to the not too many instances where the gouty diathesis may be considered as a factor. Again, the appearance of the neuropathic tendency, not otherwise traceable in the family history, in the patient's children. Semeiologically, I have

already spoken of the absence of perverted sensibility of the soles of the feet. My experience with the disease is not large, but I have never met with another case where normal sensation was retained in this locality.

The rapid course of the disease was also worthy of comment. In six weeks, from a condition of difficulty of locomotion but still of ability to walk unaidedly about the house and upon the sidewalk for distances of an eighth or a quarter of a mile, so markedly had the disease progressed that he was scarcely able to stand even while watching himself closely, and was wholly unable to take a step without the aid of an attendant.

And lastly, because it presents a case of serious and usually incurable disease promptly, rapidly, and favorably affected by the homœopathic remedy.

It may be urged that sufficient time has not yet elapsed to make his permanent recovery a certainty. I can only say that within three weeks I met him on the street more than a mile from his residence, walking briskly with no trace of his former ataxic awkwardness, and received his assurance that he felt perfectly well. The disappearance of the more marked diagnostic signs of the disease has been already mentioned. Whether well or not, there can be no doubt that the Argent. was the cause of his improved condition, because:

1. His improvement commenced shortly after its administration, and, when improvement subsequently ceased, it was renewed at once by the repetition of this drug.

2. Because the symptoms disappeared in inverse order of their appearance.

3. Because of the reappearance, as improvement was established, of symptoms which had once been present, but which had disappeared during the graver aspects of the case. The last two methods of proof of favorable drug-action have been confirmed by many physicians since Hahnemann first called attention to them, are most convincing to the observing homœopath, and will need no elaboration in a gathering of homœopathic physicians.

Discussion.

J. W. Dowling, M.D.: I have been particularly interested in the paper of Dr. Butler because in my practice, which is largely a consulting one, I see so many of these cases. The diagnosis in my own mind is perfectly clear. Judging from his temperate life, the man probably inherited from his parents a lithæmic diathesis, and arterial changes undoubtedly commenced early, and were progressive. This increase in the frequency of desire to urinate and the increased amount passed is the result of arteriole spasm with an active and hypertrophied condition of the heart, though arterial changes had undoubtedly in this case already taken place; and it is generally considered that this free discharge of urine is compensatory, for with contracted arterioles and an actively working heart the blood-pressure in the arteries would otherwise be dangerous to life. Finally, the urine became smaller in quantity and the desire lessened; to my mind this is conclusive evidence that the heart was beginning to fail. The symptoms attributed to the spinal cord are undoubtedly of lithæmic origin, and due to an excess of lithic acid in the blood. The nervous symptoms arise from the same cause. The infrequent desire to urinate arose from the diminished secretion and the want of sensibility on the part of the sensory nerves of the bladder, and an inability perhaps of the motor fibres to stimulate the muscles of the bladder to contract unless a large quantity of urine was present. The feeble heart's action, with lessened blood-pressure, diminished quantity of urine and infrequent desire to urinate, are all evidences of heart-failure. The remedy undoubtedly had its effect, but I think the relief is to be attributed chiefly to the fact that the patient was compelled by his feeble condition to be quiet, was deprived of his ordinary diet, with but little desire to eat, perhaps, and as a consequence the liver was partially restored in its functions, there was less waste material in the blood, improvement took place in the condition of the blood, in the digestive organs and in the force and power of the heart, and as the patient improved, there came an increased desire for urination from increased pressure upon the glomeruli of the kidneys. It is probable that during this man's sickness his natural desire for food, perhaps for meat, diminished, and his subsequent exemplary habits prolonged his life. It was a pure case of lithæmia from beginning to end. If the doctor had examined the pulse carefully he would probably have found changes in the radial artery, with the feeling like a whipcord under the finger. The temporal arteries will be found tortuous and prominent; often when the column of blood passing through these vessels is comparatively insignificant, the walls will stand out. We will also generally find atheromatous dilated bloodvessels on the nose, cheeks and ears. In this case fibroid

changes have probably taken place in the kidney structure itself. From long-continued lithæmia, there are changes in the bloodvessels —resulting in pathological changes in the walls of the heart, changes in the kidneys, liver and spinal cord. It is a case of what has been termed arterio-capillary fibrosis; the kidneys will probably be found contracted owing to growth of fibrous tissue, if a post-mortem examination is ever made. I am inclined to think that the symptoms first mentioned relating to the brain, were uræmic ones. It has been an interesting case to me for I see so many of them. I would attribute relief, then, not so much to the remedy, as to the rest and freedom from nitrogenous food. If we study these cases with the pathological signs I have mentioned, we will recognize them very often. With regard to the symptoms referable to the spinal cord, I differentiate between locomotor ataxia and progressive locomotor ataxia. This was a case of locomotor ataxia, but it was not progressive. When the latter term is used, it means progressive unto death. This was a case where the primary cause was uric acid which had existed in excess in the blood for years, injuring, with other vital portions of the body, the spinal cord. There was a commencing sclerosis, but its progress was undoubtedly arrested by the remedy, the absolute rest and the diet necessitated by his weakened condition. If it had continued to progress it would have resulted in fatal changes with fibroid or fatty degeneration of the heart-walls. We cannot have general changes in the arteries, without the coronary arteries suffering also. These are the pure blood carriers to the heart-walls, and if the heart is poorly nourished, owing to a tortuous or narrowed state of its vessels, it necessarily suffers, and if the blood is entirely cut off from a part, even if in small pin-points, that part dies, and this necrosis is the cause, in my opinion, of aneurism of the heart. The lateral blood-pressure being increased from some extra exertion or from passion, the weakened wall yields. Some of these cases have been ascribed to syphilis, but in nine cases out of ten, a person afflicted with syphilis has led an indiscreet life, and has been excessive in the use of stimulants. Alcohol used in small quantities and nitrogenous food in excess, will often produce this condition, and the excessive use might, in persons inclined to lithæmia by inheritance, lead rapidly to fatal changes. This frequent desire to urinate is a marked symptom of lithæmia. These patients are usually hearty eaters at every meal, the liver is overtaxed and weakened, and does not perform its functions properly, the blood becomes surcharged with uric acid; as a result the bloodvessels and other organs become affected. Lead poison is a very common cause of lithæmia with its many pathological changes. The term lithæmia is preferable to gout, since every gouty patient is lithæmic, but not every lithæmic patient is gouty. It is very common to find uric acid in the form of brick-dust sediment in the urine; we should always make it a point

to examine the specific gravity. We are too often satisfied, when examining the urine, to find it free from albumen. A persistent low specific gravity is quite as significant as the presence of albumen. Albumen is generally found when the heart begins to fail, but years of the disease may exist, with urine of low specific gravity, during which time albumen is never detected.

CLARENCE BARTLETT, M.D.: I feel that I must express a disagreement with Dr. Dowling's explanation of Dr. Butler's case, for I think it was undoubtedly a case of locomotor ataxia from organic spinal disease, for all the classical symptoms of that disease are carefully detailed. The presence of the ataxic pains, which he had had for years, and attributed to rheumatism, are exceedingly characteristic. Now, I have had a number of cases of ataxia, and these pains have invariably been present, in the way here described. Dr. Butler speaks of the absence of the patellar tendon-reflex. To produce this symptom there must have been interference in the reflex loop between the spinal cord and the quadriceps extensor. Dr. Butler states that these reflexes have returned. In this respect his case is unique, for so far as I know there is no report of such a case in medical literature. Even if we succeed in relieving in a case of organic progressive locomotor ataxia, the patellar tendon reflex does not return. This is the most unusual point, to my way of thinking, in Dr. Butler's case. In regard to the urinary and cardiac symptoms, I believe that in the vast majority of cases of ataxia, I would find fatty lesions of the heart, kidney troubles, etc. In fact the frequent urination so graphically described by Dr. Butler is often an early and characteristic symptom of ataxia. I do not believe that the locomotor ataxia was the result of the nervous symptoms peculiar to lithæmia. (Dr. Dowling remonstrated against being so quoted, saying there was no difference between them as to the case.)

SOME OBSERVATIONS IN THE TREATMENT OF DIABETES.

By J. M. Schley, M.D., New York City.

Diabetes insipidus and mellitus are both ill-understood from an ætiological as well as pathological standpoint, and in the few remarks I have to make I will speak alone of the latter form of the disease, from the fact that we meet it more frequently, and are still groping around for some drug to relieve it. It is claimed by many that diabetes m. is decidedly on the increase, and that in newly developed countries, where wear and tear is at a continuous maximum pitch, nervous disorders easily arise, and such a beginning is the first necessary link to complete the chain.

In our own western countries, and in Australia, we note items recording this subject frequently.

I will pass over the many factors supposed to cause this malady, its history, imperfect pathology, hereditary influences, reported *cures* of diabetes about the diagnosis of which a halo of suspicion may hang, etc., and will give you J. Seegen's views concerning this strangely working disease in a few words. He claims that it is a malady having for its exciting cause, *first*, some marked *nervous* shock, injury, abuse; *second*, this morbid state (functional or organic) of the nerves, affecting the medulla, cerebellum (cerebrum), the spinal column and nerves issuing therefrom, holding sway over the processes of digestion, nutrition and excretion, pervert their work. He holds it, in his writings, to be a nervous affection.

Griesinger, quoted by Roberts, tells us that few people live after its recognition longer than *three* years, though there be exceptions to this. If this be so—and we may take it in part as true, for Griesinger has had large and bountiful opportunities for definite and *accurate* observations—then, anything we may do to prolong such a person's life beyond this limit, in some degree of comfort, is our

simple duty. I maintain this may be done. In one hundred cases, ending fatally, and collected by Griesinger, we note the following table as showing the *duration* of diabetes:

Under 3 months,	1 case.
Between 3 and 6 months,	2 cases.
" 6 and 12 "	13 "
" 1 and 2 years,	39 "
" 2 and 3 "	20 "
" 3 and 4 "	7 "
" 4 and 5 "	2 "
" 5 and 6 "	1 "
" 6 and 7 "	2 "
" 7 and 8 "	1 "
Undetermined,	12 "

We note, then, that about twenty cases out of one hundred survived their third year, and after that period the remainder held an uncertain tenure of life. The progress of diabetes is generally uniform and continuous, though sometimes we may meet with cases where the glucose disappears for a time entirely, to return in its original quantity or in a lesser degree.

There are three considerations I should like to place before you, the one as equally important as the other, *i.e.*:

1. The establishment of the diagnosis between glycosuria and diabetes.

2. Willingness of patient to submit to necessary dietetic regulations.

3. Medicinal and spa treatment.

I. It seems to me that the differentiation between the disease as described under the head of glycosuria and diabetes is somewhat misleading. Glucose in the urine, in any degree or quantity, is a morbid entity, and we may, on the same ground, try to split the difference between a wee wee tubercular spot in the lung and a portion solid or breaking down from the same morbid cause, but a little further along in the race. Glycosuria, from whatever cause—as fall, pregnancy, overeating of saccharine substances—needs as much careful attention as the fully developed diabetes. I have seen, in my own private practice, one case commence as a quasi glycosuria, merely traces of glucose occurring from time to time, then steadily in small quantities, and now diabetes has appeared. This case came under observation eight years ago. The glucose voided now is four per

cent. Intense worry, continuous anxiety, and sudden shocks from unexpected deaths in her family, aggravated a nervous predisposition to the disease. There was no hereditary history. Here, then, in my opinion, was a simple case of glycosuria—none of the symptoms of diabetes being present until within the past two years. At first, the amount of glucose seldom went above 0.03. This patient is under observation, and is improving. Carlsbad is held as a last trump card. Such cases of glycosuria should not be dismissed from our minds, after an analysis where no glucose is found, as cured. I believe such cases are liable, from any exciting causes, to run into a well-marked picture of diabetes, passing several hundred grains of glucose in the twenty-four hours. Griesinger reports a case of glycosuria (?) in a medical student, where glucose was excreted in varying quantities for the space of one year, when it suddenly disappeared, and after a year's lapse of time no trace could be found. We do not feel justified in stating this man is permanently cured. His ill-nutrition was brought about, apparently, by repeated wettings while on botanical hunts. Whatever the prevailing opinion may be on this subject, it is one still in an unsettled condition. I have three cases of glycosuria now under observation—one in a young lady twenty-one years of age, one in a gouty lady 44 years of age, and one in a gentleman 53 years. In none of these are any constitutional symptoms, intense thirst, unusual appetite, loss of flesh, present. Let us consider that we have diagnosed a case as diabetes mellitus from a careful *quantitative* and *qualitative* analysis from the whole urine voided in twenty-four hours. If there be any doubt in the matter, let us submit it to an expert, or some one equally competent to give us full information. We should have no haphazard diagnosis—no uncertainty. We must say that the case is thus and so. We hear of cases *cured* by Arsenicum, Nitrate of uranium, Chloroform in dilution, etc. We must take such statements *cum grano salis*, because no analytical examination accompanies them. We admit that some cases of diabetes mellitus are curable, and that some are apparently *cured*. J. Seegen tells us that unless a diabetic adheres strictly to the necessary diet, he *will* relapse, and his disease runs its even tenor until death follows. He has known of *none* of the several hundred cases observed by him at Carlsbad, and carefully followed year after year at the Spa, and again by mail after they left, who could return to their old method of eating. Seegen was a painstaking man in all his meth-

ods; he was truly scientific, and to him in Austria, Frerichs in Germany, Bouchardat in Paris, and perhaps Johnson and Murchison in England, we owe much of our increased knowledge on this subject. To show how diagnoses (?) of diabetes are made: A little relative of mine was sent home from a fashionable watering-place with the diagnosis of diabetes mellitus. The physician had requested to see the quantity of urine voided in twenty-four hours, and as the pot was about two-thirds filled, he pronounced it a serious case. No further examination was made, as to the number of ounces voided, specific gravity, presence of glucose, albumen, etc. I approached the task of examination with fear and trembling. The urine of twenty-four hours amounted to forty-eight ounces, was acid, specific gravity 1016, light amber color, albumen none, *glucose* NONE *with most careful test*, amount of solids about 53 grammes, sediment scanty. Microscopic examination revealed nothing pathological. I do not go astray when I assert that many diagnoses of diabetes mellitus are made just in this fashion. It requires time, patience, and some experience to analyze the urine accurately.

A well-known old-school physician of this city asserted that he saw *very many* cases of diabetes mellitus, when, on close inquiry, it was found that most, if not *all*, of his analyses might be called in question! I have learned personally from two well-known (urine) microscopists and chemists that they do not meet with more than two or three per cent. of diabetics among *all* the urinary examinations they make. I know them both to be most observing and painstaking in such matters. My own experience would about coincide with that of these two gentlemen. For the *incipient* stages of diabetes I hardly think the symptoms of a little later stage are present, but the chemical test will prove its presence readily. Before we assume to cure a malady, let us be positive that we are right in our diagnosis, else little attention is given us, and our results are laughed at.

II. When we come to our second consideration—"willingness of patient to submit to necessary dietetic regulations"—we may dismiss it from further notice, by simply stating to the patient that, without such restrictions, you will not undertake to treat him.

III. And when we come to our third consideration, embracing, as it does, the medicinal, and if necessary the spa treatment, covering under these two headings also the prognosis, we reach a point in our text as important as the diagnosis.

The great question pertaining to the disease is its curability. Some cases of diabetes mellitus are curable, most of them can be ameliorated, and the patient's life prolonged for years in comparative comfort, and others, dependent upon atrophy of the pancreas as described by Lancereaux, run a rapid and fatal course. No treatment here seems to be of any avail. During the past six years I have had *seven* cases of diabetes under my personal care. The first was that of a German shoemaker. He was under observation eighteen months, and died in a profound coma of twenty-four hours' duration (acetonæmia). This man had had several such attacks, and would lie in them hours at a time. He voided, as a rule, 120 ounces daily, and ate enormously. The next case died from a complication of Morbus Brightii, cardiac hypertrophy, etc. One has passed from under my care, is alive, though his trouble is gradually tightening its grasp. The other four are still being treated with decided benefit. All four of these present rheumatic troubles. Three have visited Carlsbad, and while there, the glucose *disappeared* entirely from their urine, and remained absent until gross imprudence in eating and drinking brought a relapse. The case of one of these patients was full of interest to me. He came under my care in January, 1883. He was passing, at my first analysis, 1923 grains of glucose per day. In five months no glucose could be detected, and his urine had fallen from 90 to 60 fluid oz. He was thrown from his buggy a few weeks after the last analysis. While he lay in a semi-comatose state, no sugar was detected, and he voided from 32 to 44 oz. daily. About six weeks after the shock, it was reestablished in less quantity, and no treatment was of any avail. An *absolute meat* diet for four days did not remove the sugar. Carlsbad, on a no stricter *régime* than here, completely suppressed all traces of glucose, and on his return to this country, he was a different man. His memory was clearer, hypochondriasm removed, conversation bright and animated, gait steady, thirst markedly diminished, appetite moderate, no loss of flesh, etc. In another case, a little less severe, after Carlsbad he remained six months well of his glucose. This gentleman is, at the present writing, well, and has been so for several weeks, and will remain so unless he indulges too freely in starchy and saccharine substances. The other cases are about a repetition of these two. They have been under observation for two and three years respectively, and are improving in every way, but a "kur" at Carlsbad will have to be resorted to. All

these cases had been seen by other men here and in Europe, and diagnosis established. To sum up my experience, limited though it be, I would state it to consist, first, of using the indicated homœopathic remedy; second, strict dietetic regulations; third, Clemens' solution of Arseniate of bromine; fourth, Martineau's treatment (especially in rheumatic subjects) of Arseniate of soda and Carbonate of lithia in water charged with Carbonic acid gas; and, *last, a thorough "kur" at Carlsbad.* This "kur" must oftentimes be repeated.

Should I or any of my family develop diabetes mellitus, I would place more reliance in the *Carlsbad* Spa than anything else. Seegen saw all of his cases benefited. Dr. Klawaceks, out of 79 in Carlsbad, saw their glucose disappear save in the case of one who *would* drink beer.

CLINICAL FACTS.

By D. A. McLachlan, M.D, Ann Arbor, Mich.

Perhaps the first thing that occurs to our minds in connection with the title of this paper is, What are clinical facts? A clinical fact may be defined as any observation made in connection with disease, that has been, or is capable of being, verified. Not mere coincidences that bear no direct relation to the condition present, and that may never occur in the same condition again; such observations, unreliable as they are, have given rise to the vast amount of superstition which pervades the lay mind even to-day, and which in the past has delayed and obstructed the advance of medical science itself, so that as compared with other sciences it certainly cannot be said to be in the van. We fear, too, that it may be said with altogether too much truth, that this same acceptance of mere synchronisms as facts is even now the bane of our own branch of the medical profession, while, on the other hand, our old-school friends too often cast aside as rubbish much that may demonstrated to be clinical truth. A fact is a fact, and does not require proof to make it such, but it is usually necessary to demonstrate it in order to induce others to accept it as such. It is not always necessary to refrain from making known our observations simply because we are not yet able to prove them conclusively to others, for if this were done, many facts which are commonplace to us all, would be not only mysteries, but would not be utilized. Such would be the case with electricity, heat and other great forces which are being made to subserve man's interests and needs in innumerable directions, but of the real character of which, or their *modus operandi*, we know nothing. There is no doubt, however, that a great deal of discretion should be exercised in announcing clinical observations, for we are all well aware of the innate credulity of the human mind. This is being evidenced every day, as it has been in past ages, by the popular acceptance of the most absurd doctrines, such as the present

"faith-cure" craze, and we regret to say that such unquestioned adoption of groundless speculative theories are not confined wholly to the laity. It is apparent, then, that clinical observations had better not be made public, as a rule, without some good grounds for believing them to be *facts*, for not only does the popular mind eagerly embrace fallacies, but it is also exceedingly tenacious in its grip of them, and may take decades to rid itself of a most serious and fatal error.

Another question at once suggests itself, viz.: When we have made an observation, or formulated a theory, how shall we determine its truth or falsity? If what we have seen is a cause, then it will produce an effect; if it is an effect, then it has had a cause. Again, if our observation or theory be true, it should hold good in any number of repeated experiments in like cases; if it does not, and our methods of investigation are infallible, it must be false. Numberless facts which to us seem axiomatic, simply because they come to us from others, and we have never heard them questioned, are, nevertheless, the results of patient toil and experiment on the part of able and earnest men during the ages that have preceded us. When Hahnemann became convinced of the truth of the law of similars, he did not reject the evidence that had been accumulating during the centuries before, but he set himself patiently to the task of determining by the new light he had received, which was truth and which was error. Many things which had been accepted as facts, he was able to refute; but, astute observer of disease phenomena as he was, his theories were necessarily tinctured with the views, anatomical, physiological, chemical and pathological, peculiar to his time. The result is that some of his theories are, by the light of modern investigation, subjects of dispute. Just so with many theories now in vogue; twenty years hence they may be overthrown. Science is progressive, and as some one has very aptly said, "it is better to have our medical doctrines written on a blackboard with chalk, so as to be readily modified to suit the revelations of increasing light, than to have them engraven on tables of stone, never to be changed."

Besides these apparent axioms in medicine, a vast multitude of clinical observations are daily thrust upon our attention, and it is in these that we need to exercise the utmost discrimination. They are often brought forward by men claiming to be scientists, and backed by an extensive array of scientific experiments, so convincing as to "deceive the very elect," and yet when they are subjected to the cru-

cial test of bedside experience, they fade away into airy nothingness. These facts admonish us to be extremely cautious in accepting the assertions of any one until we have verified them by actual experiment.

It is very important for us to study the happenings of every day; an inquiring mind is pretty sure to eventually discover the cause. When Newton saw the apple fall at his side, it was nothing unusual; millions had noticed the same thing before him. They, however, had not stopped to question the cause of its falling; he did, and his reasoning suggested the existence of a law. He argued, if some unseen force brings the apple to the earth, are not all bodies governed by this same force? It did not take him long to demonstrate the law of gravitation, but when asked to explain the *modus operandi* of the law, he did not even attempt it.

Hahnemann observed that the effects of Cinchona bark upon the healthy were similar to the effects of the disease which it cured. Others had noticed this before him, but the idea of a law of similars was at once suggested to *him*, and he began to investigate in this direction with the result that is so familiar to us all. The existence of the law he was able to demonstrate, but the *modus operandi* is as much a mystery to-day as it was then. Probably the way in which drugs act curatively on the human system will never be explained. Fortunately, it is not absolutely necessary that we should know, in order to utilize the great fact, any more than it is necessary to understand the exact nature of the wonderful force which we term electricity, in order to make it useful in art. We know that in the process of assimilation, the food which we eat is changed into tissue, and that each portion of the anatomy takes to itself the material needed for building up and preserving its structure intact, but we know nothing further of the process. Some vital influence is at work, which we denominate catalysis, but our knowledge of it is purely hypothetical.

Men often arrive at a knowledge of existing facts, by very different processes of reasoning. We have seen that it was a clinical fact which first led Hahnemann to the discovery of the law "*similia similibus curantur*," and which, reasoning from cause to effect, enabled him to say that a certain drug would be curative where it had never been tried previously. On the other hand, reasoning from effect to cause, when it is known that a remedy will cure a certain condition, we are able to say, to that extent, what its action will be

on the healthy. Hahnemann and his followers first find the condition induced by a drug on the healthy, and then apply it in a similar diseased condition; our old-school friends, on the other hand, first try remedies on the sick, and thus endeavor to define their place in therapeutics. Thus we find that conscientious observers in other schools of medicine are gradually arriving, by the slow process of clinical experiment, to the point which our great master reached at a single bound. No one, either lay or professional, can read the writings of advanced and independent thinkers in the allopathic or eclectic schools to-day, without being convinced that these writers have either appropriated and claimed as their own, the therapeutical knowledge of Hahnemann and his successors, or that they have, unaided and by careful investigation and experiment, reached the same conclusions identical with our own, only by a more circuitous, difficult and uncertain route.

It has been said that a man, having a preconceived theory and setting out to prove it, can always find plenty of evidence to confirm his opinion. However, we have had and still have too many earnest and honest investigators in our own school, who "prove all things, holding fast only that which is good," to admit of any doubt as to the verity of homœopathy, even if we were not able to bring forward a great mass of outside testimony in support of it. As Paul said to the Athenians, "He whom ye ignorantly worship, Him preach I unto you," so may we say to the bulk of old-school practitioners to-day, that which ye ignorantly practice, we preach unto you. It is interesting to note the distinction that has previously existed between the homœopathic and allopathic schools of medicine. Medicine, in its earliest history was chiefly an art, for it had little of science or exact knowledge about it. One of the earliest instincts of man must have been to relieve his suffering brother, and hence we find him resorting to the various measures which tradition or his own fancy might prompt him to try; in this way, during the lapse of ages, a mass of empirical knowledge was built up. This knowledge was acquired by observation and experience, and we know how little it accomplished in reducing medicine to a science, until logic was brought to bear in interrogating nature, in pointing out fallacies and sources of error, in bringing to our aid all the appliances of physical science, and, in short, in eliminating all doubt and uncertainty, and insisting that fact shall take its place.

For centuries men adhered to the doctrines of Galen, and this blind adherence is particularly noticeable until the sixteenth century, when Paracelsus, that magnificent charlatan, gave it a stunning blow from which it has never recovered.

From this time on, a spirit of inquiry, similar to the religious spirit that characterized the Reformation, was ushered in, and more or less steady progress is apparent since. Any one will admit after a moment's consideration, that pathology, diagnosis, and prognosis are much more fully developed than the other departments of clinical medicine, etiology and therapeutics, though it must be confessed that wonderful advances have been made in this direction during the past few years. It is a well-known fact that etiology has been, and is now, engrossing the attention of our old-school brethren, while therapeutics has been, since Hahnemann's time, up to a recent period, almost the sole study in our own school. Each party entered into its respective study with a zeal which almost excluded a knowledge of the other, which explained the puerility of the allopaths in therapeutics, on the one hand, and of the homœopaths in etiology, pathology and diagnosis, on the other. The mutual recognition that in the study of etiology and therapeutics, we have the Alpha and the Omega of the physician's work, is tending even now to remove the distinct lines which have heretofore marked the advance of the great medical schools.

That the study of these two chief departments of clinical medicine should go hand-in-hand no one will, we think, dispute, and it may be said to be a clinical fact, for it is a conclusion made absolutely certain by bed-side investigations. That medicine is truly a science is in no way better exemplified than in the fact that tautology, or practices which tend to throw intellectual dust into the eyes of others less informed, is being rapidly eliminated from the domain of medicine. Medicine has no need, and should have no desire to shut off the light from the gaze of any one, and no true physician will assume the guise of a necromancer or conjurer, in the pursuit of his art. Such practices appeal only to the superstition, ignorance, and credulity of humanity, and are now relegated to the medicine-man of barbarian nations, or the pompous and unscrupulous charlatan of civilized nations.

Hygiene, or the study of how to preserve health and prevent disease, must necessarily comprise the etiology of disease, and is receiv-

ing the attention of all branches of the medical profession, irrespective of their individual therapeutic beliefs. To accomplish all that is possible, however, it becomes necessary to educate the public who are the recipients of the physician's life-long study and efforts. When, however, in spite of all safeguards, disease has assailed humanity, the benign science of therapeutics interferes, like the welcome hand of a tried friend, to succor and save the victim. The art of hygiene will never become so perfect as to completely eradicate disease, for so long as the tastes and passions of men remain, just so long will there be indulgence of them; hence it follows that disease will ever exist in some form or another, and loudly call upon us for relief.

Logic, with its stern demand for exactness, is gradually classifying and compiling clinical facts, and the time is coming when medicine will establish her place among the exact physical sciences. To be a science it must be governed by a fixed natural law, and working from this, an exact system of therapeutics will be secured. We have no objection to working together with our old-school friends, in the field of preventive medicine. The field is large and fruitful, and when our knowledge approaches perfection, much will be removed from the domain of pathogenic therapeutics that now belongs to it. When we understand the cause of a disease, we will be in a position to cure it by simply disposing of the cause, or by restoring the physiological function that has been perverted. This will hold good in the idiopathic affections, but when we have to deal with specific diseases, other methods must be considered.

The existence of germs, or disease-agents, which always produce the same type of disorder, is now very generally recognized and admitted. In this class of diseases, both preventive and curative medicine is required. Isolation and disinfectants may serve for the former, but the latter involves the internal use of health-disturbing agencies. Whatever the specific causes of disease may be, whether they be the much-talked-of bacteria, or the so-called ptomaines, it is easy to imagine them invariably producing the same conditions; just as we find the various poisons which we use to counteract their dire effects, invariably setting up the same train of symptoms. The germ-theory is now so universally accepted that it is useless, perhaps, to refer to it except as an established clinical fact, for whether we accept the idea of a bacillus for each specific disorder, which may be seen and studied

under the microscope, or some other more subtle virus which man can never discover, the fact remains that certain unhygienic or unsanitary conditions are necessary for the development and fatal activity of the poison.

Assuming this to be true, something that will remove these conditions, and thus destroy the poison and render it innocuous, is requisite for the prevention of disease. This something we find in the so-called germicides or disinfectants. Our allopathic confreres, in their well-nigh utter therapeutic imbecility, turned, as would be expected, to these agents for aid in combating disease, after the virus has entered the human body. The presumption that germicides were equally potent under any and all circumstances, within or without the body, led, within a comparatively recent period, to the attempt to cure that most insatiable of all specific disorders, tuberculosis, by the introduction of germicides into the lungs or other diseased part, either by injection directly into the affected tissues, or, by one of the natural openings, as in Bergeon's treatment, etc. However, every attempt has so far been unsuccessful and will ever be so, for it is manifestly impossible to introduce into the animal economy a quantity sufficient to destroy these microscopic invaders without also destroying the subject of them. Hence this practice has been abandoned by its most earnest and ardent advocates, and we believe it to be a clinical fact that the utility of germicides, so far as the patient is concerned, ceases when the morbific material has found lodgment in the tissues. Their only usefulness is in limiting the contagion to the patient himself, and thus preventing the spread of the disease to others. It is no more important to know that we possess such protective agents, than to know the limit of their usefulness.

It follows then, that disease cannot be cured by chemically-acting remedies. How, then, is it accomplished? Clinical observation has taught us that in the midst of the most virulent epidemic, while thousands are falling victims to the fell scourge, certain persons walk unharmed. We see something analogous to this in the action of certain vegetable poisons, and we do not have to refer to the tradition concerning the deadly Upas tree, to exemplify this fact. While preparing this essay, a young man is under treatment for an aggravated case of Rhus poisoning. After a warm bath he merely passed by where the noxious plant grew on the roadside, not having come in contact

with it at all. His friend walking with him suffered no inconvenience whatever. Here is an anomaly for which we cannot account; some handle the poison with impunity, while others suffer from mere proximity to it.

We are accustomed to account for this peculiar fact, by saying that it is because persons are, or are not, susceptible to the infection, but why they are not, we are unable to do more than conjecture. It is well known, however, that there are many factors at work in producing immunity from contagion, such as the air we breathe, the food we eat, the fluid we drink, the clothing we wear, the occupation we follow, the habits we practice, the constitution we inherit, and in fact almost everything that goes to make up our weal or woe. It is a familiar historical fact, that diseases that once scourged whole countries or continents, leaving only isolated specimens of humanity to mark the course of the destroyer, are now comparatively innocuous because of the well-advised and effective hygienic measures of our own time. Small-pox for instance, which formerly reckoned its victims by the millions, in our day scarcely excites more than passing notice. Why such a change? Simply this: in early days, the people were ripe for the harvest—so thoroughly predisposed to disease by their unhygienic habits, and surroundings, that the slighest amount of infection was like a match to a powder magazine, and the result was a morbific explosion that shook humanity to its very foundation. Now everything is so far changed that, in places where the best sanitary conditions prevail, disease either cannot find an entrance at all or its onslaught is confined to the few individuals, present in every locality, who have neglected those measures which have given others exemption. It is quite possible that one of the prophylactic measures mentioned may be sufficient to protect human beings from infection, just as a disinfected atmosphere would do; for instance, a salubrious air or climate will protect residents from malarial poisoning. It will not have the same effect, however, upon a visitor who is already permeated with malaria; in his case it will be inert, or will only precipitate an outbreak which he might have escaped had he remained in his malarious home. Here, again, it is seen that, although disease may be prevented by hygienic measures, it cannot be removed by them when once it has gained possession of its human habitation. In other words, hygienic or therapeutic means do not directly antidote morbific material in the body. How then do they act?

Simply by increasing the vis medicatrix naturæ, or the natural vital resistance to disease, and in the principle "similia similibus curantur," we have the method laid down and the means suggested by which this may be accomplished.

Time and again since Hahnemann first discovered this law, it has been verified by careful and scientific men, that drugs which produce a condition in the healthy similar to that produced by the disease which we wish to cure, will, by some process not known, stimulate the vital energies and enable the system to rid itself of the morbific agent, whatever it may be. From the light of modern research, the conclusion is inevitable, that susceptibility to disease is nothing more or less than a lessened resistance to the encroachments of the morbific agent; hence it follows that anything hygienic or medicinal which can increase the vital resistance is capable of preventing or removing disease. If the substances found to be destructive of specific poisons outside the human body were equally potent to remove the affection when given internally, it might be easily possible to find a specific remedy for every such disease. Affections of this sort are self-limited, or run definite courses if left to themselves, which careful and repeated observations have clearly mapped out; but they have at the same time revealed the fact that in many cases the course is not typical, *i.e.*, that such cases often abort spontaneously, and that certain characteristic manifestations are often absent.

If this be true, and all clinicians agree that it is, what cause has any one for asserting that we cannot lend a willing and efficient hand in aiding nature to overcome the disease? Diagnosis has been so far perfected that it is scarcely possible for a known disease to run its course without being recognized.

If it is aborted by proper treatment, the diagnosis obviously cannot be made upon the characteristic symptoms or course. For this reason many deny the claims of cures made by remedies. Most of us, however, can recall numerous cases which we have diagnosed at the very onset, and which the after events have confirmed; on the other hand, we can recall equally numerous cases which presented just as plain or even more definite grounds for the diagnosis, but which terminated early and favorably following the administration of the indicated remedy. Were we not equally sure of our diagnosis in both instances? Then, if a man can designate a certain condition correctly a dozen times when after events confirm it, why can he not tell the same condition

even once when it is not confirmed simply because he has taken means to prevent its further development?

There is no sense in men tying their hands by any such conclusion as that specific diseases cannot be aborted or ameliorated by medicines. Let allopaths, whose empirical methods will not admit of them being sure of anything, boast of their therapeutic imbecility—nothing else can or should be expected of men who repudiate all law or truly scientific methods, and are content with the same "cut and dried" methods that were in vogue centuries ago. Homœopaths, however, who claim to have even *prevision* in therapeutics, should be ashamed to acknowledge any possible room for doubt except in their own fallibility, where our law is applicable. What a sublime spectacle we see in Hahnemann's pointing out, before he had even seen a case of cholera, just which remedies would be most successful in its treatment! This is not a solitary instance of the kind, as we all know, and with a firm confidence in the law of similars, what may we not be able to accomplish in the field of therapeutics?

The real difficulty and the cause of so much doubt and hesitation in our own ranks is the fact that we have tried to perform impossibilities by the use of remedies. We have tried to adapt our law to cases to which it could not possibly be applicable, and because it has not performed what could only be done by other means, we have said the law is defective. The sooner we give up trying to antidote chemical poisons, to destroy parasites, to restore already dead tissues, or to supply air, food, and drink with the indicated remedy, the sooner will our law be admitted, as well as claimed, to be universal. In other words, we have tried to do with remedies what we could only do with hygienic, chemical, and mechanical means.

The false assumption that our law is applicable to conditions which are manifestly outside the province of any drug to cure medicinally has led to gross errors, and has caused doubt and misapprehension of the only sound principle and working hypothesis in pathogenic therapeutics. Wood, Ringer, Bartholow, Brunton, and all the great therapeutists of the old school, either in plain words or in unmistakable terms throughout their writings, have admitted that the homœopathic principle is of "partial application." We thank them for that word; it steels our hearts to the taunts and persecutions that may come to us, and nerves our hands to greater effort in our work of investigating and defining the exact sphere and possi-

bilities of our system of therapeutics. As in other sciences, so in medicine, much has been learned during the past century; with the nearly perfected studies of chemistry, physiology, and pathology, and the aid of the thermometer, microscope, stethoscope, ophthalmoscope, and the various other appliances which the collateral sciences have furnished us, we should be able to continue the campaign indefinitely, and carry the war into the very camp of the enemy. "Homœopathy expects every man to do his duty." That duty does not consist in idle boasting that "similia" can perform impossibilities, but rather in defining just where it is, and where it is not applicable, and in demonstrating that in this sphere it is, as we claim, universal.

Discussion.

J. P. Dake, M.D.: I desire to express my gratification on listening to this paper of Dr. McLachlan. I am always pleased when I find the young men of the profession taking hold of subjects like this we have heard discussed in the present paper. The question of facts is precisely what we are interested in. It is a question of facts from beginning to end in medicine. Facts in anatomy, facts in pathology, facts in physiology, facts in pathogenesis and in clinical experience. But there has been an exceeding looseness in the medical profession, as well as an exceeding uncertainty in medicine. If you examine the biographies of men eminent in the medical profession, who have practiced for many years, you must know that as they have grown older they have lost confidence in medicine. It has been so in the old-school, and in a measure it is so among homœopathic practitioners. And why? Because so many mistakes have been made in regard to facts, so many fancies have been taken as facts; and procedures based upon these fancies have, of course, so often proved fallacious. I am pleased, therefore, to witness inquiries such as have been put forth in this paper. We must learn that every occurrence that is *post hoc* is not, therefore, *propter hoc;* that one thing may follow another and not be caused by it. It is in this matter of cause and effect that we have fallacies such as mentioned in the paper. We have suffered in our own branch of the profession by too great assumption. Every practitioner here present knows that, in the beginning of his practice, he has had cases where he gave his remedies and cures followed, in which he was positive that the medicines were curative. But too many have been ready to rush into print with these cures, considering them as absolute effects of the medicines

administered, little or no credit being given to the circumstances which have contributed to, if they have not really occasioned the cures. We have suffered by too great assumption of this kind, this claiming too much. To my mind there is great danger in this. If we assume to have cured cases which experience has taught us to be incurable with medicine; if we give to the medical world accounts of cures in which there is no shadow of a probability, except in the mind of the practitioner reporting them, we lose ground by it. Such reports are put down against us, and we fail to obtain credit in other cases where we deserve it. I am, therefore, exceedingly well pleased when examinations of this kind are made, and we are led back to consider what are facts, and to be sure that we have them.

CLINICAL CASES ILLUSTRATING THE LAW OF SIMILARS.

By Prosper Bender, M.D., Boston, Mass.

The great natural law of similars affords the true, the effective basis for our assaults upon disease; and the following clinical cases will emphasize the value of the rule of selecting the remedy in accordance with the totality of the symptoms. Too many physicians of our school are in the habit of rigidly connecting in their minds the usefulness of a medicine with the particular malady, practitioners who graduated first in the old-school universities being most prone to this shortcoming. For instance, in my own earlier years as a homœopath, I never thought of prescribing a medicine for a disease unless recommended by some eminent authority, or found by myself effective therein; and, a little later, the physiological school of experimental medicine offered its attractions, to which I equally succumbed. Consequently, I doubt not, I sometimes met with less success than was practicable, attributing my failures to defects in homœopathy, while in reality due to an incomplete apprehension of its laws of cure. Nowadays, after years of experience and reflection, I prescribe a remedy which the symptoms indicate, without hesitation whether, so far as my knowledge extends, it has ever previously been so employed or not. And I have seldom had occasion to be dissatisfied with the result. The two cases, which I submit at present, gratifyingly illustrate the importance of following this excellent rule, so ably proclaimed by the father of homœopathy.

On the 17th of September last I was called to see a lady, aged 38, mother of several children. She had enjoyed fair health until the July previous, when she experienced dyspeptic symptoms, languor and debility, with tardy and scanty menses. But, after a residence of some five weeks at the seaside, she regained apparently her usual health and strength. Ten days previous to the above date she began

to feel nervous and restless, with some nausea, vertigo, and headache. She sent for an allopath, who diagnosed indigestion, prescribing a purgative and a tonic. Three days later the muscles of the left side of the face began to feel swollen, stiff and numb, accompanied by twitching of the muscles of the eyelids, lips and cheeks, with much vertigo during motion. The day following she was worse, and worse still the next, when the doctor spoke of the malady as involving some affection of the brain, which so alarmed her as to prompt a message to myself to take charge of her case. Her condition included these symptoms: Pulse 90 and a little full; temperature, 101°; she complained of much apprehension, restlessness of body, and creeping chills; tongue moist, showing imprints of teeth; much thirst, and vertigo during motion. Besides, the muscles of the left side of the face were fixed, destroying its symmetry, and giving an odd, bizarre look, which is quite characteristic or typical. The healthy side reflected all passing emotions, while the other, the affected, appeared blank and expressionless. The corner of the mouth was drawn on the sound side; she could not dilate the nostrils, raise the alæ of the nose, nor move the upper lip. Moreover, the levator and orbicularis palpebrarum were powerless on the affected side; nor could she close the eyes, and I was told that she slept with them open; there was an almost constant overflow of tears (*epiphora*) from the left eye. On attempting to eat, the food was caught between cheek and gums; she experienced difficulty in pronouncing labial consonants and vowels, the sounds being indistinct. The muscles, numb to the touch, showed something unusual, that the fifth pair of nerves was involved. I administered Aconite 3x, with orders to give a dose every hour until better.

The report two days later was, that after taking the medicine she slept better, feeling less nervous and restless. But after the first day she complained of severe stitching pains in the right temple and face, which were relieved by the pressure of a tight bandage and local application of cold water; motion, or the least jar, increased the pain. There was also a moist, slimy condition of the mouth, with much thirst; impaired taste, with nausea and faint feeling at the epigastrium; great depression and melancholy, so that she wept at the least disagreeable word or sympathetic remark; dull pain in lower maxilla of right side. The appearance of the face was unchanged, but the numbness and stiffness had diminished. Most no-

ticeable was her feeling worse in a warm room, and relieved by the admission of fresh air. No reflex movement could be elicited by touch, though the stimulus of electricity caused the muscles to respond faintly. After this test, applied with both electro-magnetism and galvanism, and considering the eyelids did not meet in sleep, I became fully satisfied that the paralysis was of peripheral, and not of central origin, and, therefore, gave a favorable prognosis. I prescribed Pulsatilla 30x every fourth hour till relief was secured.

At my next visit, 48 hours later, I was informed that the head pains had been promptly relieved, as also the spirits; but since noon that day (22d) sharp, stabbing pains in both hips, extending down the limbs to the ankles, were felt, with restlessness and a desire to move about, motion affording relief. I ordered Rhus 3x every second hour. Three days afterwards my patient's mental symptoms had returned, with some of the temple pains and nausea. I then saw I had made a mistake in changing the prescription, and gave Puls. again, under which she steadily improved. The motion of the facial muscles gradually returned, her spirits revived, and within two weeks she was completely restored to health.

This was certainly an aggravated case; the portio dura of the 7th pair of nerves was involved, and the superior branch of the 3d, the 5th being likewise affected. The most favorable cases of Bell's paralysis take between five and six weeks for recovery, while here is a case of restoration in less than three. Such a result could hardly have been achieved so quickly without particularly suitable and effective remedies.

A second case of peripheral facial paralysis came under my notice recently, which was as readily determined by the objective and subjective symptoms. When the patient tried to work the facial muscles those of but one side responded, leaving the other side expressionless; the levator of the eye and of the nose refused to act. There was no numbness of the muscles, showing that the 5th pair was unaffected. But there was an abnormal gustatory condition—a metallic taste. The subject was a young man of generally good health, not in the least of an emotional temperament, and yet, as he answered my questions, he could not restrain his tears. He felt chilly most of the time when indoors, but revived and warmer in the cool, open air. The reflex movements were intact, the facial muscles readily responding

to either form of electricity. After taking Pulsatilla 30x, he immediately improved, and in ten days felt almost perfectly well.

This last was a milder case than the first, of course, but the cure was quicker than usual in the slightest attacks under the old-school treatment. In both cases I have illustrated how useful, as a guide in the selection of the remedy, is the state of the emotional spheres, and the condition of aggravation or amelioration by heat or cold. This is a subject which, however, I cannot further dilate upon in the present brief paper.

I have recorded the above cases as a modest addition to the noble edifice of homœopathy, and with the hope further that they may help some brother practitioner to adhere more strictly to the law of similars—the domain of truth, by which the human race has been already so richly blessed.

CLINICAL OBSERVATIONS.

By A. D. Fisher, M.D., Elkhart, Ind.

In casting about for a line of thought whereby I may add my mite to the already great store of therapeutic knowledge, I have chosen to, in part, deal with some remedies that many, too many, in our ranks ignore.

The disposition to cling to old and tried remedies is strong with most of us and it is well that this is true; but there come times to all of us when our old remedies do not respond to our demands and we have to seek elsewhere for aid. Such has been my experience, and when in doubt what next to do, I turned to Schüssler,—timorously at first, for his theories were not in accord with my line of thought, but with each trial my faith grew stronger, and to-day some of his so-called tissue remedies are more frequently used by me than any others. First in frequency of use, and consequently in satisfactory results, is Ferrum phos. Had Schüssler done no more than to place this remedy in its proper position in therapeutics he might be assured of a memorial monument more enduring than marble.

In the absence of provings that throw light in the dark places, when shall we use it? To many there's the rub. Schüssler's theories may be wrong but his practice is correct. It covers much of the ground heretofore given to Aconite, Belladonna, Bryonia, Phosphorus and Tartar emetic. In acute inflammatory affections of the respiratory tract it has, in my hands, done wonders. For instance: When during the course of bronchitis or pneumonia, with temperature moderate, say 100° to 102°, there is a sudden rise of fever and increase of pain or cough, here is just the place for the Ferr. ph., especially if the case lacks *prominent* indications for a different remedy. To illustrate a point further; if the case presented a full, bounding pulse, great thirst, restlessness and *fear*, I would give Aconite, but minus the fear, Ferr. ph. So with Bell. or any other

remedy. Another medicine may do much good, but the Ferr. ph. will give the best results.

All physicians know the difficulty in getting subjective symptoms in children and the impossibility in infants. In capillary bronchitis, to which this remedy corresponds more closely, perhaps, than any other remedy, I have seen the most striking results. Here the objective symptoms are clear and, generally, our diagnosis is easily made, and in typical cases, when made, the prescription of Ferr. phos. follows very properly.

A physician in a neighboring city called me to see with him a child that had been very ill with lobular pneumonia for several days and was not expected to live. A sudden rise of 3° in temperature with dyspnœa, suggested Ferr. phos., which was given every two hours. Improvement was rapid and complete, though Kali. sul. was needed later to finish the cure; thick yellow expectoration being the indication for this remedy.

On paper such a case lacks the interest it has at the bedside. This was a desperate case, where, without prompt help, the child had but a few hours to live. The physician in charge was a careful and competent one, and had given the best indicated remedies at his command without relief. He now uses Ferr. ph. very frequently, the beneficial action of the remedy being so prompt as to carry conviction to all who saw it.

The next of Schüssler's remedies that has been frequently used is Magnesia phos., the great remedy for acute neuralgias, especially those where the external application of warmth ameliorates the sufferings, though this condition may not always be present and still the Magnesia prove curative. I have never seen beneficial results from its use, however, where cold applications ameliorated, so that I have come to look upon such a condition as contra-indicating the remedy.

In colicky babies, where day after day they cry with colic half the time; where nutrition does not seem to be interfered with, this remedy proves rapidly curative; not palliative, merely, but correcting the morbid action on which the colic lives. It is in typical facial neuralgias, however, that I find this remedy oftenest curative. The subjects are generally strong and otherwise well, when exposure or some other exciting cause sets the pain going. In some the pain is constant from day to day, with exacerbations at regular or irregular

intervals. Pain varies in character and location but is generally severe.

Many cases could be given that would illustrate the beautiful action of this remedy, but they would really add nothing to what I have already given, that would aid in selecting this remedy. Boericke and Dewey's compilation of the Tissue Remedies gives in good shape all that is known of these remedies. It may be objected that all this and much more does not prove the homœopathicity of these drugs to the conditions named: admitted; but full provings will just as surely show their similarity as they did in the case of Gelsemium, which was delivered breech first.

A case which I think illustrates the similarity of drug to disease, and was, consequently, curative, I will narrate under

Cuprum metal.—A strong, hearty man, forty years old, has had yearly attacks like the following for ten or more years: Always under old-school treatment, and was once sent to our State hospital for the insane. After a few days of undefined ill feeling, not preventing work, he suddenly becomes unconscious, with tonic spasm of nearly every voluntary muscle, and rare, difficult breathing. This condition lasts five to fifteen minutes, when consciousness returns and cramps attack, first the toes, then calves and thighs, and so on up to the abdomen, and finally the hands. After two to five minutes of this distressing cramping, he seizes his head with both hands, cries out as if in great pain, and immediately becomes wildly delirious; tries to escape; tears at his clothing; goes on "all-fours;" tears pieces of dead skin from his bare feet and eats it, etc. Finally, exhausted, he drops into a doze, only to be awakened in a few minutes with the cramps, and the same round of symptoms follow. Owing to absence of his regular attendant, I was called to attend him in such an attack as just described. During a brief lucid interval I offered him a drink of water, which he at first refused, but at my urgent request he attempted to drink, but no sooner had the water entered his mouth than his jaws came together with a snap, biting the glass—the biting being wholly involuntary, and caused by painful, spasmodic contraction of the masseters. I gave him Cuprum metal. 6x trit., and repeated the dose in fifteen minutes. Immediately after the second dose he had the worst attack of all. He recognized me, and threatened to demolish me if I did not allow him to go out. It took the combined strength of two strong men and his robust wife to prevent

his escape from the house, till he finally dropped exhausted, slept for a half-hour, and awakened perfectly clear-headed, and we experienced no more trouble with him. His toes cramped some during the next six hours, but he was out of doors next day and about his business again in three or four days. His urine was very scant during the attack, and was not tested at the time, but a few days later there was some albumen.

The remedy was continued for several days at lengthened intervals.

Heretofore, under allopathic medication, his attacks lasted from twelve to thirty days, Morphia hypodermically being his chief medication. During the past winter, about a year from date of last attack, he was threatened with another, but Cuprum in a higher potency was given, and he did not get bad enough to keep in-doors.

For several years, *Sinapis alba* has been in quite frequent use by me and some of my medical acquaintances whose attention I have called to this truly useful and often-indicated remedy. Allen gives the symptoms on which we have based our prescriptions; symptoms 33 to 41 inclusive, 58, 87, 91, 98, and many more that are so closely similar that they really amount to repetitions.

Add to these, as clinical observations, verified repeatedly, ulcers throughout the mouth, especially on the tongue, with violent burning pain, and the whole buccal cavity so sensitive that even the blandest food or drink is unbearable.

The two following cases are fairly typical and illustrate its sphere of action as well as would a dozen.

Mrs. ——, pregnant eight months. Has taken no exercise for weeks; instead, has sat in a cushioned rocker from morning to night for many weeks, though she is a strong, healthy woman. After another physician had been in attendance, without any material benefit to patient, I was called in to relieve her of the following symptoms: Burning in stomach all the time, extending up the œsophagus to throat and mouth, the latter full of "canker sores," and mouth, throat, and stomach burn fearfully whenever she takes any food or drink. Sinapis alba 2x was given with almost magical effect, curing her rapidly and completely.

She continued to rock till labor set in, which I terminated with the forceps. Child was plump and well.

In a social letter to me, Dr. C. F. Ellis, of Ligonier, Indiana, writes as follows: "Made a most beautiful and rapid cure with my

preparation of Sinapis alba. It was a lady with a three-months' old child, who had been suffering intensely with sore mouth, accompanied by hot, burning, sour eructations. Had been under old-school treatment all the time (three months) without any relief. The burning started in her stomach, and would come up to throat and mouth with the sour eructations. The mouth was very sore all over, with little white points surrounded by red mucous membrane. Gave Sinapis alba 3x three times a day. The sour eructations *stopped the first day.* The mouth was entirely well on the third day."

The homœopathicity of the drug to these cases cannot be disputed by any person of average intelligence, who will compare the symptoms given with those I have referred to in Allen's *Mat. Med.*

Robinia is another remedy that I have reason to believe is overlooked. It is the only remedy that in my hands has even modified the intensely acid vomiting in cancer of the stomach.

In four cases of this disease—diagnosis confirmed by autopsy—the Robinia held this acidity thoroughly in check, and did much to ameliorate the sufferings of the hopelessly sick.

In many cases of acid dyspepsia, it has been highly curative. Have used only the third dilution.

While I am not alone in the use of *Apis* in venereal diseases, the following characteristic case may help some who do not look beyond Mercurials, Nit. acid, and escharotics, in primary syphilis, to the better way.

A woman of the town presented herself for treatment. She had a large soft chancre that had been steadily increasing in size, in spite of "black-wash." There was great swelling of the labia, pale, doughy, with sharp, stinging, or cutting pains when sore was touched. Halsey's 3x trituration of *Apium virus* was given every four hours, and in a week she was well, and has remained so for three years. Gonorrhœa, with pale, doughy swelling of the prepuce, has found its remedy in Apis.

In conclusion, let me simply call attention to a few remedies that I believe are seldom used by a majority of physicians. All can learn the indications for them in the proper places, and I have nothing new to add. *Kali sul.*, in old gonorrhœas; thick, yellow discharge (no stricture); also, in otorrhœa, with foul-smelling, yellow discharge. *Ferrum picrate* and *Calcarea picrate* in neurasthenia—the grandest remedies of them all. As might be inferred, the former corresponds more to iron, the latter to lime.

VERIFICATIONS FROM CLINICAL EXPERIENCE.

By C. H. Lawton, M.D., Wilmington, Del.

Case I.—H. B., a gentleman 28 years of age, blonde, finely organized, nervous temperament; business, travelling salesman.

A friend as well as patient. Called on him socially one evening on his return from a trip.

On greeting him I saw he looked badly and said, "You look sick!" His response was, "I am, and I want you to prescribe for me. I have had a terrible headache for three days which comes on about 5 o'clock every afternoon."

While he was telling me this I noticed that one hand was badly bruised and swollen.

"What is the matter with your hand?" I asked. "Well," said he, "I will tell you all about it.

"When I am off on a trip I generally stop at a hotel that is central and, taking a carriage from that point, drive around to my customers. A few days ago I started out with a horse that I thought was all right, and he was until I had driven some distance in the country, when he balked, and he balked with me sixteen times that afternoon. The last time I became so angry that I struck him a blow with my fist, and I believe if I had taken my pistol along I would have shot him."

I immediately associated the anger with the headache.

"Had you any headache," I asked, "before this?" "No!"

"Have you had it ever since?" "Yes!"

I gave him a dose of Colocy. 30th, Tafel, dry on the tongue. In five minutes he said, "Doctor, I am better." I remained with him half an hour, and his headache was gone. He had no return, and the medicine was not repeated. Colocy. has extreme irritability, anger, with indignation, and headache at 5 P.M.

CASE II.—C. L, a child ten months old, supposed to have been cured of malignant diphtheria under old-school treatment.

It was left with a chronic catarrh of the bronchial tubes. Mucous rales loud and continuous, violent cough, with retching and vomiting after each paroxysm.

I saw the child once while it was sick but did not prescribe for it. Made up my mind, however, that Lach. was well indicated and would cure the case. Disease commenced on the left side; breath fetid, throat badly swollen, and tender to external pressure.

The attending physician said the cough and catarrh were chronic conditions left after diphtheria that would have to *wear off;* he thought, perhaps, it would take a year.

Another old-school physician thought it might take two or three years.

In this condition it was placed under my care.

Having seen it during the acute attack I reasoned thus: Lach. should have cured this case without any complications. This chronic trouble is a part of the original disease or an outgrowth of it. Why should not Lach. clear up the whole case? Acting on this thought I gave Lach. 30th, Tafel. In three weeks the child was well and needed no other medicine.

CASE III.—Mrs. J. W., 24 years of age; scrofulous diathesis; face pale and sickly. A history of the case revealed the following:

Headache aggravated by looking upward, or going up-stairs.

Sleep unrefreshing, awakens with a scream.

Bowels had not been moved naturally for three years; stools hard and knotty; hunger at 10 A.M., must have something to eat at that hour. Gave Sulph. 30th, a powder dry on the tongue at bed-time for three nights.

The constipation (for which she took the medicine) was cured, as was also the headache; her sleep became normal, and there was a marked improvement in her whole condition.

CASE IV.—J. B., 34 years of age; nervo-bilious temperament, tall and slender; was afflicted with an in-growing toe-nail.

It had been for years a part of the Sunday morning programme to let the pus out from under the nail, cut a V in it, scrape it very thin in the middle, and stuff cotton under the sides.

I saw him accidentally one morning going through with the operation, and said, "Why don't you have it cured?" He looked at me

very incredulously. "Cured!" said he, "why, I have had it all my life; it is hereditary; all my family are afflicted the same way."

I said, "I think I can cure it; all *you* have to do is to take the medicine." I gave him a dose of Silicia 30, dry on the tongue. He received no other medicine, and in a few months his toe was well.

This was seven years ago, and he has had no trouble with it since.

CASE V.—Mrs. L. J., a lady 40 years of age, tall, dark complexioned, nervous temperament.

Met her at the home of another patient; called one afternoon at 4 o'clock; she was having a violent chill. Very red in the face; headache mostly on the right side; nausea, with sour eructations.

I asked if she was subject to these attacks, were they periodical, and what treatment had she employed. In answer to my questions she said:

"I have been subject to them for nearly seven years.

"They come on every third or fourth day, and sometimes it has been a week, but always at the same hour of the day, 4 o'clock in the afternoon."

For the first few years she had tried every available means to effect a cure, but getting no relief she had of late abandoned all treatment.

Lyc. was so well indicated that I was anxious to give it, and persuaded her to take a dose dry on the tongue.

One dose cured the case.

A CASE OF GLOSSO-SYPHILIS OF ELEVEN YEARS' STANDING CURED IN FIVE MONTHS.

By Thomas Skinner, M.D., London, England.

Having been asked by Dr. Strong to furnish a paper for "The American Institute of Homœopathy" as one of its corresponding members, on 21st of March, 1887, I replied that I would do so, and I trust that this which I now send will prove acceptable. Dr. Strong at the same time seemed anxious that I should give my reasons for so long a silence (from 1876 till 1888, twelve years). My reasons for silence are, that hitherto I have never been asked for a paper, and I prefer to wait until asked, as it might not be welcome.

On the 17th of May, 1887, I was consulted by a gentleman, aged 48, married, the father of two children—a boy and girl—9 and 12 years of age respectively, and so far as the children are concerned, as also the mother, there is no trace of acquired or of hereditary or constitutional syphilis observable in any of the three. My patient has fair hair and complexion, and has become considerably gray-haired. The duration of the disease of the tongue dates back eleven years, and during all that time he has suffered on and off, and has always been more or less under the medical and surgical care of his family medical adviser, assisted by the best of the faculty in Edinburgh and London. On the 17th of May, 1887, before consulting me, he had just come from a most trying consultation with three of the first surgeons and syphilidographers in London. The opinion of the triumvirate was that their patient was the subject of constitutional syphilis, and, judging by the duration and obstinacy of the affection, the absence of permanent success in the treatment, the present appearance of the tongue and the patient's age, they were further of opinion that the case would sooner or later become malignant and excision of the entire organ would be absolutely necessary, and they led their patient and his friends to understand that that terrible alternative was near at hand, and could not long be post-

poned. Two of the triumvirate are baronets—and the untitled consultant is a surgeon whose opinion, diagnosis and prognosis, I consider to be second to none. Before concluding the medical history of my patient, let me just add that the usual allopathic anti-syphilitic treatment was adopted. Iodide of potassium, etc., "galore!" for years—not excepting a course of syphilization which was carried out *secundum artem* by, I believe, a leading surgeon in Edinburgh, Scotland.

I need scarcely add that there was any amount of local treatment, —cauterizations, gargles, and inspections.

It will readily be believed that, when my patient received this triune unfavorable diagnosis and prognosis, he was only too glad to listen to the advice of his brother who advised him to take the opinion of a homœopathic physician, namely, myself.

Description.—The tongue, although bearing marks of old cicatrices, was larger than natural, extremely irregular in shape, and deeply fissured both lengthwise and across. The general color of the organ was a mottled purple, the tip red, and the whole appeared vascular, tuberculated, and ulcerated, and covered in parts with a brown mucus. The uvula did not exist, and I was informed that it had sloughed away some years previously. The tuberculated or nodulated portions are indurated to touch, almost resembling cartilage or scirrhus.

Subjective.—The organ is very sensitive to fluids, effervescing ones in particular, to salt and salt things or food, also to hot drinks. As a rule, the sensitivity is worse when fasting. With the exception of obstinate constipation for years, which he attributes to leaving off smoking tobacco, there was no constitutional disturbance, no emaciation, and an absence of pain. The disease interfered with speech, mastication and deglution, but it in no way interfered with nutrition and the functions of organic life. I need hardly add that his breath was not always the sweetest.

Diagnosis.—I gave it as my opinion that it was a case of constitutional syphilis, pure and simple, and that I did not fear its passing into scirrhus, or carcinoma, or any disease more malignant than syphilis itself. I further gave it as my opinion that the disease had been simply suppressed and never cured, although at times it had become better and worse, as obtains in most forms of chronic disease, cancer alone excepted, which, as a rule, goes from bad to worse to the bitter end. The differential diagnosis in this case lay in the absence

of pain or constitutional disturbance, the painless nights, the otherwise robust health enjoyed by the patient, and *the duration of the complaint—eleven years.* It is, alas, too often the case that the physicians of the old school, *when they cannot cure a case of the kind,* throw out a hint to the easily frightened patient that it may pass into cancer or malignant disease, and require excision; or a man high in this world's rank, he may be an Emperor, has contracted or inherited syphilis. Of course, it would not, could not be right to call the disease by its proper name, but they must get a histologist to give a negative diagnosis that it is *not cancer.* It is my candid opinion that many cases requiring excision of the tongue for carcinoma (?) are cases of constitutional syphilis, yet

> "Brutus is an honorable man,
> So are they all, all honorable men."

Prognosis.—I gave it as my opinion that the case was possible of cure by homœopathy *and without local treatment of any kind,* and that I should do my best if entrusted with the case.

Treatment.—Inasmuch as the map of the symptoms is to be found under Nitric acid (*vide* Hering's Condensed and Allen's Encyclopædia), and as this is one of our best antisycotics, antisyphilitics and antipsorics, on the 17th of May, 1887, I gave him Nit. ac. 50^{m} (F.C.) four powders, one night and morning, and then Sac. lac.

June 3d.—Constipation better, if anything. Dryness of tongue much less, and the fissures seem contracting. As I was about to sojourn at my summer residence in Invernesshire, Scotland, and as the gentleman is the owner of a steam-yacht, I advised him "to put to sea," and sail in my direction. He did so, and went in his yacht to the west coast of Scotland.

June 20th.—I received a most unsatisfactory letter from him, reporting that up to the 13th of June he had improved steadily, but since then he had been suffering perhaps more discomfort from the state of his tongue than he ever did, and to use his own words—"Whereas a week ago there was a marked improvement. I cannot account for it in any way. My general health is good, and I feel strong and vigorous, sleep and eat well."

June 22d.—Feeling much puzzled to account for this "backwardation" coming on the head of such steady improvement, and thinking that the Nitric acid had become exhausted, I sent eight more powders of the 50^{m}, one to be taken night and morning.

July 6th.—Continued aggravation of all the symptoms, and a new symptom turned up clearly due to the Nitric acid—*tongue sticking to the teeth*—determined me that the aggravation might be due to the medicine, so I sent him Nitric acid cm. (FC.) one dose, and S. L. every night.

July 14th.—I received the following report from my patient:

"Tongue worse, it continues to give me trouble and anxiety. The large ulcer on the right edge continues to increase in size and depth. The white patches on the upper surface and on edges continue to increase in size and in number. The sores are principally on the *right* side of the tongue, but one or two small ones are now appearing on the *left* edge.

"The *left* half of the tongue is just about the natural size, but the whole of the *right* half is very much swollen, even to two or three times the natural size and I have much difficulty in speaking and eating. The whole of the swollen parts are *hard* to touch and I think increasingly so. The sharp pains in tongue are worse in the morning (about 3 A.M.) and are easier after breakfast. There is a great deal of saliva in the mouth, and the breath has a peculiar smell. My appetite and general health and spirits are very good, and I am doing my best to hope for improvement." Soon after this letter I received a telegram from my patient's brother, a homœopathic physician, begging me to meet him as soon as possible, as he dreaded the very worst, namely, that the much dreaded prophecy of the triumvirate had come at last. We met, and certainly the present appearance of our patient's tongue was awful to behold and almost defies description. Add to the above description by the patient the fact that a large portion of the right border of the tongue was eaten away, and that there was a deep chancre in the middle of the tongue one and a half inches long by half an inch deep, and lined with a thick coating of lymph between an ash and a wash-leather color, the surface of the organ exuding mucus, pus and blood with a most offensive odor, and we have a faithful photo of the then state of the tongue.

I comforted my patient and his friends by leading them to understand that I saw no reason to change my first opinion, namely, that it was constitutional syphilis combined with psora that we had to deal with—and that the present seeming aggravation of the disease was nothing more nor less than the Nitric acid setting free the suppressed virus, and eliminating it through nature's own selection of surface, the tissues of the tongue.

Inasmuch as *the swelling of the tongue was semilateral*, three medicines were indicated, namely; Calcarea, Silicea and Thuya—but, as Silicea corresponded best to the amount of suppuration and deep, almost perforating ulceration present, and being a deeply working antipsoric remedy, his brother and I agreed to give Silicea the preference.

July 16th.—Silicea 50^{m} (F.C.) was given him in water every four hours as the symptoms were urgent.

July 21st.—Swelling of right half of tongue feels and looks less. The fearful looking chancroid ulcer of right border of tongue is healthier and less deep. The deep ulcer in mid-tongue is the same. Has slept well, bowels less constipated, and he feels altogether better than he has done for the last fortnight. Continue Silicea 50^{m}.

July 28th.—Right border and side of tongue steadily granulating. The centre and left side *in statu quo.* He has a general aggravation at night from sunset till sunrise, easier by daylight. *Luesinum* cm. (F.C.) five powders—one each night at bedtime while they last—stop the Silicea.

August 22d.—Better nights and better on the whole, but the central deep ulcer remains unaffected by the remedies. Took a fresh photo.

Swelling of *right* side of tongue (CHg); ulcerated tongue, indurated and painful. Tip sore to touch and tender. Mid-tongue, an oblong painful blister; salivation; left side sore (T. F. Allen); Thuya.

As reserves, I found ulcer mid-tongue, chronic glossitis; Cupr. S.

Tip sore, deeply penetrating ichorous ulcers, Psor. (CHg).

On the above date, 22d August, he was put upon Thuya cm. (F.C.) one each night at bedtime, and he continued the Thuya up to the 26th of October, 1887, when, along with greatly improved diet of liquid beef (Dr. Skinner's "Home Made"), oatmeal porridge and cream, vegetables, fruit and farina—all swelling, ulceration and abrasion of his tongue ceased. In order to make assurance doubly sure I gave him a dose of Luesinum cm. once a week from the 26th of October up to the end of last year.

Last Christmas I received a letter from my patient stating that there was now no swelling, ulceration, or feeling of the slightest discomfort in his tongue or in any part of his person. That his taste is perfect, his breath unobjectionable, his bowels regular, and that he can eat whatever comes before him. Need I add that he and his friends are very grateful, whilst I feel myself a foot taller? He remains well, June 6th, 1888.

GASTRALGIA WITH COMPLICATIONS—A CASE.

By L. Pratt, M.D., Wheaton, Ill.

May 14th, 1888.—A. L., 53; has been troubled with gastralgia after eating, for several years past. Has taken cathartics, tonics, etc., with no good result. Became discouraged, and abandoned all treatment for a year past.

Soon after each meal severe pains come on in the stomach. At times a heaviness, with sharp, "cramping" pain, almost unendurable, lasting from one to two hours. Suffers from a dull, heavy headache, with dizziness much of the time. Is constipated, with frequent ineffectual desire to evacuate. At times has painful hemorrhoids. Is dull and depressed in feelings. A little thing to do seems a "mountain" to him. Tenderness at the pit of the stomach. Wakeful at night, especially latter part. Prescribed Nux vomica, 6x trit., about two grains, to take three doses daily. Three doses is all he has taken. The first dose, he says, relieved him. All the symptoms improved at once, and within two weeks he considered himself a well man.

It has been three months, and none of his symptoms have returned.

REPORT

OF THE

BUREAU OF SURGERY.

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THE TREATMENT OF WOUNDS OF THE INTESTINES.

By Charles M. Thomas, M.D., Philadelphia, Pa.

When one considers the number of cases of wounds of the abdominal viscera which are constantly coming under the notice of surgeons, it becomes a matter of surprise that the management of these accidents, except, perhaps, in cases of protrusion of viscera, should have remained until recently in a state of such great uncertainty.

In the statistical reports of our civil war, there are recorded more than 1000 cases of gunshot wounds of the abdomen, and, although the mortality rate of more than 90 per cent. clearly indicates the inefficiency of the then existing methods of treatment, the subject, singularly enough, received but little serious consideration; so little, indeed, that when the late Marion Sims, shortly before his death, urged that these wounds be treated as any others, by pre-exposure and suture, his proposition was looked upon by most surgeons as entirely impracticable, if not preposterous. Not long after this,

* Paper not received.—Editor.

however, in 1884, appeared the valuable experimental works of the elder Gross, of Philadelphia, and Parkes, of Chicago, in which the operative treatment is not only strongly advocated, but placed upon a scientific and practical basis. These papers were promptly followed by equally important ones, and reports of cases by Mikulicz, Lloyd, Kocher, Bull, and others.

Although up to the present time, the list of published cases of laparotomy for perforating abdominal wounds is scarcely more than half a hundred, the total result shows already a reduction of the mortality-rate to less than 70 per cent. Indeed, the voice of a large proportion of the profession is now so strongly in favor of treating these cases on essentially the same principles as those laid down for wounds of other parts, that it would seem we are rapidly approaching a time when the surgeon will be held answerable in the courts, if he refrain from exposing and inspecting the abdominal viscera, when, in a shot- or stab-wound, he is unable to positively assure himself that visceral penetration has not occurred.

That, however, we have already reached that point, as has been claimed by some enthusiastic writers, cannot be rightly asserted, since even within the past year a number of prominent surgeons have publicly expressed a leaning toward the old expectant methods, and Richardson, of New Orleans, reports thirty two (22?) cases of gunshot wounds of the abdomen, with thirteen recoveries, and nine deaths.

Bearing this in mind, though recognizing the fair showing in the cases treated by operative interference, I would put the question: Would not most cases in the hands of the general practitioner or the inexperienced operator run a better chance of recovery under a conservative or expectant treatment?

We must bear in mind that a proportion, though small, of those cases left to nature or treated conservatively, will recover; and, on the other hand, that the operative procedure means decidedly something more than a simple laparotomy, more even than the average ovariotomy.

It necessitates a most careful search and inspection of the various recesses of the abdominal cavity, and the management of wounds of much greater importance, and calling for greater precision and delicacy of handling than those found in free surfaces; it requires the ability to carry out with exactitude and with a minimum loss of time the various steps, in a perfectly aseptic manner, and this means the

possession of a grade of skill which can only be gained by no inconsiderable amount of surgical training and experience.

I cannot but think, then, that the answer to my question should be in the affirmative, and that, unless the attendant have some experience in abdominal as well as other surgery, he will, in most instances, only add, by his interference, another serious complication to an already desperate condition.

I, of course, here do not refer to those cases in which there is a protrusion of the wounded intestine through an abdominal opening, where the indication for treatment is perfectly plain, viz., to thoroughly cleanse the part, repair the visceral lesion with proper suture, replace by enlarging, if necessary, the abdominal opening, and close the parietal opening.

The greatest obstacle to the general adoption of laparotomy for intestinal wounds without protrusion, lies certainly in the difficulty which not infrequently arises in positively determining from the early symptoms, the presence of visceral lesions.

The question of *peritoneal* penetration can be easily and safely settled, and in doubtful cases always should be, by following the track of the wound with the probe and knife to the level of the peritoneum; but the detection of such an opening, while rendering highly probable the presence of visceral penetration, is not positive proof of such an injury, though accepted by many, and I believe rightly so, as quite sufficient reason for a further exploration of the abdominal cavity.

Naturally, the diagnosis would be no longer uncertain, were intestinal matter or urine found in the wound, but unfortunately these materials rarely appear at the opening, even though exuded in quantity into the peritoneum. Bloody stools or urine, or sanious vomit, should strongly excite suspicion of penetration, but these symptoms, again, are rarely found among the early ones. Too free a flow of blood from the wound to be accounted for as coming from the parietes, while a comparatively rare symptom, would certainly be sufficient ground for explorative laparotomy. An emphysema of the abdominal wall about the wound is emphasized by some as a valuable symptom, but its importance is lessened both by the fact of its rarity and for the reason that it may be present even when the intestines are intact.

The sudden appearance of pronounced tympanites, specially of

such extent as to mask even the normal area of liver dulness, while by no means presenting itself as a constant symptom, furnishes, it is claimed, a very strong evidence of intestinal perforation, and is indeed looked upon as pathognomonic of the existence of the injury.

Shock, pain and nausea depend so much for their degree upon individual idiosyncrasies, that they can but rarely be useful as positive indicators of organic injury.

With the view of establishing a constant and reliable test of intestinal perforation, Dr. N. Sem, of Milwaukee, has instituted a series of experiments, which were repeated a month ago before the American Medical Association, in which he inflated the bowels per rectum by hydrogen gas.

The escape of the gas by the abdominal wound, it is claimed, will certainly occur if perforation of any portion of the gastro-intestinal canal has occurred. In the *Medical News* of June 9th Dr. William Mackie, Dr. Sem's associate, reports the first application of this test to an actual case in the human subject.

The result was entirely satisfactory.

Whether this method can be so simplified as to render it one of general utility can only be determined by further experience, but in hospital practice at least, I can see no reason why it should not be promptly adopted.

In the absence of such a test, or other positive indication of a visceral penetration, what is the proper course to be adopted by the surgeon? Although opinions are still divided upon this point, personally I have no hesitation in answering that if examination of the wound shows a peritoneal opening, unless one is able to make a fairly satisfactory exclusion of visceral lesion, it becomes one's duty to continue the exploration into the abdominal cavity.

When death occurs after wounds of the intestine, shock is rarely and hemorrhage in comparatively few cases, the direct cause. The majority of fatal terminations is undoubtedly due to peritonitis, and blood poisoning following the absorption of either the products of extravasated intestinal contents (sapræmia), or the decomposed inflammatory exudations (septicæmia). In the comparatively small numbers of instances, when recovery has taken place spontaneously or under conservative treatment, a reparative peritonitis has probably shut off the involved area, or closed the perforation before the escape of fæcal matter into the peritoneal cavity.

The object, then, of the operative treatment is to anticipate and prevent this extravasation by a speedy closure of the perforation; or, to remove already existing exudation, check hemorrhage, repair intestinal lacerations and cleanse and close the abdominal cavity.

If it be determined upon, the operation should be carried into effect at the earliest possible moment after the receipt of the injury. Any delay would only be justifiable in the presence of pronounced shock; and if the case be not seen till peritonitis is already established, the operation would surely, in most cases, be contraindicated, both on account of the probable impossibility of finding the perforation among the matted intestines and the difficulty in cleansing and properly draining the peritoneum.

Preliminary to operative interference, a careful study of the position of the patient at the time of the accident and the probable direction from which the missile or weapon came, the character and direction of the wound track in the parietes, etc., should invariably be made, and will often give most valuable information as to the probable course of the foreign body within the abdomen, and at least an approximative estimate as to the organs probably injured by it.

As to whether the laparotomy shall be done typically, *per linea mediana*, or by enlarging the wound of entrance, will depend somewhat upon circumstances. Occasionally, as in front shot-wounds well to the side, where one may exclude the probability of damage, over an extended surface, or in a direct stab, where the depth of abdominal penetration is not great and the visceral injury probably localized, or, again, in slashed sabre-cuts, where the abdominal wall gaps widely, the enlargement of the entrance wound might enable the operator to reach and treat the organs involved without difficulty.

Opinions, however, seem fairly well united that the median incision is usually preferable, in that it gives the fullest view of the abdominal interior, allows the freest manipulation of the contained organs and a perfect removal of extravasated blood and other materials.

In carrying out the technique of the operation, it goes without saying that a perfect asepsis should be striven for, from the preparatory cleansing of the integuments to the final closure and dressing of the abdominal wound.

The greatest possible care must be taken to prevent a chilling of

the peritoneal surfaces, and to this end the free use of pure hot water and hot aseptic towels cannot be too strongly insisted upon.

In the depression and collapse so commonly met with in prolonged operations within the abdominal cavity, there is probably no resuscitant so effective as a free irrigation of the peritoneum with hot water. The question of the advisability of employing germicidal solutions still remains unsettled, but of the dangerous actions of these solutions in the ordinary strength within the peritoneum there is certainly no doubt.

Outside the management of the wounded intestine, the steps of the operation in no way vary from those of a laparotomy for any other purpose. While the practice of operators may vary somewhat, on the ground of theory or personal preference, as to the particular form of suture best adapted to repairing intestinal rents, the one great *desideratum* for all must be the inversion of the edges in such a manner as to insure a close approximation of the serous surfaces, without including the mucous lining of the tube in the stitch. This indication is most effectively accomplished by the well-known Lembert suture, or its modification by Czerny.

Above everything else the operation should be carried on *methodically* and *with rapidity without haste.* Already a fatal issue has followed the overlooking of wounded points, through a lack of systematic procedure, or a precipitancy in closing the operation, born of the fear of a death upon the table. To insure the most complete inspection of the intestinal loops, with the minimum amount of bruising incident to the handling of them, a free abdominal section, particularly in fat individuals, is imperative, and in most cases should reach from a couple of inches above the pubes to a point well above the umbilicus. In cases of free hemorrhage, the first attention should be given to tracing out its source and controlling it with ligature, suture or other applicable means. In absence of such bleeding, those loops of intestines should be first inspected which lie in the supposed track of the missile, though under all circumstances, barring a free hemorrhage, the rule should be held inviolate, to deal with each intestinal lesion as it is discovered.

Having cleansed and closed such wounds as fall under notice immediately after exposing the abdominal contents, a methodical inspection of the whole alimentary canal should be made from the

stomach to the rectum and this followed by a rapid examination of each other organ contained within the abdominal cavity.

While *all bleeding points* should be most carefully dealt with, especial attention must be given to the vessels of the omentum on account of their well-known tendency to consecutive oozing.

In contusions and pronounced ecchymoses of the omentum, no doubt the safest plan is to freely resect the part after careful ligation.

Every intestinal or mesenteric wound, however small, calls for suture.

Bruises and deep abrasions, particularly of the mesentery, are best managed by excision and immediate suture.

Experiment and experience have apparently definitely proven that even when the edges of a bowel perforation are much bruised or lacerated, any attempt to trim away the shreds is a useless expenditure of time. They only require to be carefully turned in toward the gut lumen, under an accurate Lambert suture, either interrupted or continuous.

Rarely, portions of the gut may require resection, as where two or more lacerations are so situated as to imperil the vitality of the wall between them, or where the mesenteric border is greatly damaged. The details of such resection require no comment here, as they are identical with the same operation for other causes.

One of the most embarassing complications of the injuries under consideration, is found in the occasionally accompanying wound of one or more of the other abdominal organs. Hemorrhage from the solid viscera, is rarely easy of management, and when the organ is a removable one, as the kidney or spleen, and the wound extensive, a complete enucleation is probably the safest plan to pursue.

Hemorrhage from more superficial lesions or from wounds of the liver is probably best controlled by very deep-grasping sutures or the thermo-cautery at a dull heat.

In the after-care, essentially the same line of treatment should prevail, as that following an ordinary abdominal section.

Shock, as after all abdominal operations, will first claim the attention, and is most promptly controlled by heat to the extremities, head and rectum, and gentle, cautious stimulation, preferably hypodermically or per rectum. The remedies most frequently called for

in this connection will be Aconite, Camphor, Coffea, Arsenic, and Capsicum; and Digitalis and Atropia hypodermically.

After the performance of a enterroraphy, the first and most important matter is to secure perfect rest for the damaged intestine during the time necessary for repair of the sutured lesions. To this end the patient must be kept perfectly quiet in a recumbent posture, with the knees flexed; and life sustained for at least forty-eight hours by rectal alimentation alone. More especially is feeding by the stomach to be most cautiously renewed when the wound is of the upper intestines or the stomach itself.

The question of drainage must be decided by the condition of the peritoneum at the close of the operation. If it be found impossible to make a perfectly dry toilet of the cavity, or if a peritonitis have started before the operation, the abdominal drainage must be employed.

Upon about the fifth day, a movement of the bowels may be encouraged by an enema, and a careful low diet allowed by the beginning of the second week.

Peritonitis, that *bête noir* of abdominal surgery, may set in at any time, from a few hours most frequently, to several days after the accident; if sthenic and localized in character, the prognosis may still be hopeful; but if it be general and septic, the issue will, in a large proportion of cases, be a fatal one within a short time. The symptoms announcing its advent are too well known to require detailed consideration here. The rigor, the cutting, burning abdominal pain with distension, thoracic respiration; the watery, greenish, perhaps stercoraceous vomit, the distressing hiccough, the dry, furred tongue, intense, unquenchable thirst, pinched features, and the wiry, more and more rapid pulse will indicate only too certainly its dread presence.

In the early stages, my later experience in traumatic peritonitis has proven to my satisfaction the marked efficiency of continuous cold applications to the abdomen. The relief of pain thereby has been pronounced, and in at least one case I am convinced that the checking of the inflammatory action was due to its persistent use. In the later stages, and, no doubt, in certain individuals, even at the beginning of the attack, hot fomentations will be found more comforting. The internal remedies most frequently called for will

probably be Aconite, Bryonia, Rhus, Cantharis, Terebinth, Mercury, Arsenic, Chininum arsenicosum, Belladonna, and Opium.

When marked restlessness with apparently uncontrollable pain are present, unless there are obvious contraindications, the surgeon is, I believe, not fulfilling his whole duty to his patient if he deny him the relief not infrequently to be obtained from full hypodermic doses of Morphia.

Discussion.

O. S. Runnels, M.D.: The subject before us is one of great importance, and I had hoped to hear some of the surgeons of the bureau discuss it before I had anything to say. As the essayists have well said, gunshot wounds of the abdomen are of a very desperate character. You are not always sure that you have not a perforation of the intestines. I had a wound of that kind some time ago, in which it was the opinion of the consultants that the intestines were perforated. There was no direct evidence, however, that such was the case, as of fæcal matter in the wound or blood issuing from the mouth or rectum. We decided to follow the expectant plan of treatment. The case progressed to perfect recovery, the ball having done no permanent injury.

It is not a common thing for the general practitioner to meet with such accidents as that. Much more frequent are the cases of obstructed bowel. In my experience, I have had five cases of that kind. The first one was unique. It happened in the early part of my experience. The patient had already had the trouble four days and was then dying. I even then proposed laparotomy and fortunately for my reputation it was refused. At the post-mortem examination, the ileo-cæcal valve was found on the left side instead of on the right—the ascending colon on the left side, the descending on the right.

The sooner these cases are relieved, the better. I take no stock in the expectant plan of treatment for them. In four cases I have proceeded with the use of hot enemata, injecting the bowel to the utmost capacity, and having then a hasty evacuation. In one or two of the cases, after a few efforts of that kind, relief was obtained. The other cases were more tedious. Then by inverting the patient, letting him stand on his head or assume the genu-pectoral position, forcing the abdomen to the utmost, and at the time of the greatest strain grasping the patient around the waist and lifting him and shaking him, relief is sometimes gained. I succeeded in one obstinate case in thus getting relief. In that case, I employed beef-gall injections, and after fifty-two hours of continuous work, succeeded.

N. Schneider, M.D.: This subject is as interesting to the physician as to the surgeon. I do not know that I care to discuss the

subject of the first paper, but there are some points in it that might be profitably spoken of. But I will say what little I have to say on the subject of obstruction of the bowel. Dr. McClelland has told us of the different forms of intestinal obstruction, that from external pressure, from internal obstruction, etc. Now these conditions are treated altogether differently. The treatment given by my worthy friend who just sat down, will do for non-inflammatory obstruction, from fæcal matter or foreign substances in the bowel, but it would be bad practice in inflammatory obstruction. The expectant treatment is good, but it should always be conducted under the most careful observation.

If the lumen of the bowel is only partially obstructed, relief frequently comes by the administration of the indicated remedy, among which you will find Nux, Colocynth, Dioscorea, Veratum alb. and Camphor. Complete rest should be given the bowels by full doses of Opium. I do not believe that Opium will interfere with the homœopathic treatment, but if the lumen of the bowel is cut off completely, the sooner you operate the better. This may be known by the train of symptoms accompanying the case. Now if you were always able to ascertain from the symptoms present just where the obstruction is, I tell you it would be a great thing. You would then save more patients than you do now. We are not always able to tell just what portion of the alimentary canal is involved. But by the careful noting of the symptoms of all cases that come under observation and their comparison with the pathological condition found in operating, and post-mortem lesions in case death takes place, will teach us much.

We should watch the patient carefully with the fingers on the pulse. The thermometer is not reliable. I have observed in all conditions of the alimentary tract when the visceral peritoneum is involved, the thermometer ranges very little above the normal. I have seen persons go through all the stages of a fatal peritoneal inflammation with the temperature raised not more than one and a half degrees above the normal. The pulse is your best indicator, always. The pulse in these cases is a little one, and when it comes you must relieve your patient at once or he will die. There is a tendency for the surgeon to rely too much on his surgical powers and lose sight of the great adjuvants he has in the homœopathic remedy that should always be kept in mind by the man who understands "Similia similibus curantur." There is a point in the first paper that attracted my attention, and that is the employment of antiseptic methods in laparotomy.

I am not much of a believer in the general doctrine of antiseptic treatment, but I believe in cleanliness,—a clean surgeon, clean instruments and a clean nurse. I would rather have clean water than carbolic acid or corrosive sublimate.

If suppurative peritonitis is produced by germs, is it not because there is a condition of the system that invites them? This is a point well worth thinking about.

S. B. PARSONS, M.D.: Dr. Runnels states a case of gunshot wound where he did nothing. He left the case to nature alone and it got well. Now it is a well-known fact that there are no greater dodgers in the body than the intestines. A bullet may pass through the abdominal cavity and yet not perforate the intestines. Suppose that there was injury of the intestines. We don't always have extravasation afterward. We don't always have evidence of the perforation in the rectal discharges. The same thing may be the case when the ureter and kidney are wounded. The ureter may be cut completely across without hæmaturia, and you never know what the matter is until you examine the case post-mortem.

These penetrating wounds of the abdominal cavity are matters of great interest to the surgeon and extremely grave to the patient. The first question is, "Have I got a penetrating wound of the abdominal cavity, and if I have, have I injury of any of the organs of that cavity?" You may have exudation into the cavity and yet the patient get well. If there is an exudation of blood, it may be absorbed. We may inject milk and blood into the peritoneal cavity and it is absorbed. Why, then, cannot nature absorb exudations of blood from accidental causes? When there is degeneration of this exudate, abscesses form and peritonitis results, then it is that operation is necessary, and not until then. If we have injury to the intestines, how are we to know it? A point in the diagnosis of intestinal perforation has lately been introduced by Dr. Sem, of Milwaukee, an account of which I read in the daily papers. I determined to try the experiment on a dog. I took a broad-bladed knife and stabbed the dog; I then introduced gas into the rectum, and found that it escaped from the mouth and not at all from the wound. On killing the dog, I found that the intestines had been perforated, but that the edges of the mucous membrane were everted and completely closed the wound, and in this manner prevented the escape of the gas.

DR. BUSHROD W. JAMES: I want to relate a matter of peculiar experience upon the subject of intestinal surgery before antisepsis began to be used. On one occasion, a young man received a stab-wound of the abdomen. I was summoned, and found there was a great protrusion of the intestines with an incised perforating wound of the small intestine, and a non-perforating one. The former was sewed up with silk ligatures. By this time a surgeon of the old school, who had also been summoned, arrived and took charge of the case. He drew open the wound of the abdominal walls, and thus was enabled to replace the intestines, returning the sutured wounded part also to the cavity of the abdomen. He saw that the abdominal cavity was filled with blood, and thought and stated that the case would necessarily die in a few hours. So he sewed up the abdomi-

nal wound without cleaning the cavity, and sent the young man home to die. His brother was a homœopathic physician, from whom I afterwards learned that the patient made a recovery, mainly under the use of Aconite and other homœopathic remedies.

In regard to the bowel disturbance; I once had a case of typhoid fever that went for five successive weeks without the bowels being moved. At the end of that time when an inclination to a movement occurred, I had the patient take an enema fully distending the rectum, and an enormous evacuation followed without untoward result of any kind.

There is one important fact with regard to antisepsis. We do know that many operations could not be performed successfully before the days of antisepsis. When in Europe, about twenty years ago, I was afforded the opportunity of seeing Lister's early methods in the Glasgow General Hospital. At that time he was using a dressing putty containing a certain proportion of Carbolic acid. He showed me that wounds thus treated healed without any discharge whatever. If those who object to antisepsis follow it out according to the rules laid down, they would be successful; but if they take some new experimental method of applying it and fail, they should not blame antisepsis for their own personal failure. In London, eight years ago, I found Professor Lister even more successful with his Carbolic antiseptic method than in Glasgow, because he had in those years so wonderfully improved his older method; and now the most hazardous operations under antisepsis are everywhere undertaken.

CHARLES E. WALTON, M.D.: I wish to emphasize the unreliability of a symptom by Dr. Thomas as pathognomonic of intestinal perforation, and that is, tympanitic distension of the abdomen. The case in point was that of a gunshot wound in the abdomen. A bullet of 32 calibre entered the abdomen about one and one-half inches inside of the superior spinous process, and was followed by collapse, and in a few days by fever and great distension of the abdomen. Yet in two weeks the patient was well. The abdomen was perforated, but not the intestine.

I also wish to call attention to the unreliability of the injection of gas. The dog which I secured happened to be a constipated dog. The gas would not come through his nose. I perforated the bowel with a pistol-wound, and tried my gas and no gas came. I found the ilium perforated in a number of places and packed with fæces. I can readily imagine a case where the gas-injection would fail to prove diagnostic.

In regard to laparotomy for intestinal obstruction, I would say that this operation should be unhesitatingly performed for purposes of diagnosis. The time will come when the surgeon will do this with as little hesitancy as the laryngologist now looks into his patient's throat. When Dr. Schneider proclaimed the use of water for antisepsis, I was somewhat astonished at the "prohibition" applause

which this audience gave him. You can no more secure antisepsis, on the part of the ordinary surgeon, by preaching the use of plain water than you can turn the attention of some persons to heaven by preaching a comfortable hell. While it is a fact that boiled water, clean hands, and clean appliances, will do all that is necessary, we should not forget to teach students the detail of elaborate methods of antisepsis, so that they shall *habitually* come to all surgical work, and especially abdominal work, with that degree of personal and armamentarial cleanness which is necessary to insure operative success.

R. LUDLAM, M.D.: I did not have the pleasure of hearing the paper read, but I did come in in season to hear this discussion. In cases of laparotomy and surgical interference for the relief of obstruction and intestinal wounds, the domains of the surgeon and gynæcologist come together. Some practical points have been brought out here, and I may, perhaps, add one or two. I enjoyed Dr. Schneider's reference to the failure of the thermometer in peritonitis. As incident to the subject under review, I want to say that it is only when peritonitis becomes septic that the thermometer is worth anything in a diagnostic way. Then the hyperthermal condition betrays the sepsis. A subnormal temperature always indicates serious results. In peritonitis the pulse is the best and most constant sign, no matter what other class of symptoms appears. Wherever you have peritonitis you will always have a rapid pulse. It is not only rapid, but it is filiform. I was also very glad of the reference Dr. Schneider made to the condition of the patient as indicating the tendency to suppuration. It gives me the opportunity of saying that a homœopath, Dr. Tessier, was the first to call attention to the purulent diathesis.

As to antisepsis, I believe that Dr. Walton is right, that is, provided instruments have been thoroughly cleaned. The celebrated ovariotomist, Keith, said that it was the willing but dirty fingers and instruments of the surgeon that carried death and devastation in the olden times. Putting instruments in boiling water, and drying them carefully and heating them in an alcohol flame, is better than any antisepsis. As for the "beasts" in the water, the microscopists tell us about, it is no matter what becomes of them. Experience teaches us that putting instruments for a time in boiling water, wiping them dry, and then putting them through an alcohol flame, is all-sufficient. But don't afterwards put them in a stinking old bag to carry them around the country in.

As for allowing the bowels to remain constipated, I heartily agree with Dr. James in all he has said.

ALONZO BOOTHBY, M.D.: Dr. Ludlam has mentioned two of the three most important methods of infection of wounds; one from the fingers and instruments of the operator, which covers a very dangerous

field and is very frequently the cause of trouble, and the other in the patients themselves. There is a third method and probably more frequent than the second one I mentioned, and that is from the atmosphere. I am of the opinion that it is impossible to say when the atmosphere contains germs of inflammation and when it does not. After coming in contact with a wound their entrance into the system can only be prevented by the use of antiseptics; something to destroy them or render them inert. This should be applied directly to the wound after the operation is complete. That will cover to a certain extent a third method of infection. I should advocate so-called antisepsis for that purpose. In regard to the discussion, it has been too much confined to the ten per cent. of cases that get well to the neglect of the 90 per cent. of cases that prove fatal.

I am inclined to believe that when more than two dogs are experimented on, we shall find that Dr. Sem has made a great discovery, one that we shall be very glad to take advantage of and willing to give him the credit for.

J. K. WARREN, M.D.: I am reminded of the school-boy who when asked the definition of a disinfectant replied "a smell that smells worse than the original." I do not believe in adding one poison to kill another. What we want is cleanliness. It is yet to be proven that any better results have been obtained by antiseptics than by the use of simple hot water. I believe germs to be the result and *not* the cause of disease.

L. H. WILLARD, M.D.: I rise to speak of gunshot wounds of the abdomen. It has often seemed to me if an early laparotomy had been performed on General Garfield the result might have been different. It is an important fact to know with what impunity the abdomen can be opened, especially the abdomen of man. We all know that the statistics in regard to the operation in woman are becoming less fatal every day. Had we the same experience prior to 1860 the numerous cases of gunshot wounds of the abdomen, which were generally left to themselves, might, in many instances, have been cured. When I was medical cadet in Georgetown Hospital we had four cases similar to that of General Garfield. At that time it was considered hazardous to undertake laparotomy, and hence they all died. I believe, in cases of gunshot wounds penetrating the abdominal wall, the operation of laparotomy is perfectly justifiable and that in the future the operation will be endorsed by all surgeons.

J. W. HAYWARD, M.D.: There is one point which to my mind has not been settled with sufficient definiteness, and that is just when we shall interfere with wounds of the abdomen. Is it necessary for us to be satisfied that the abdominal viscera are wounded? It seems to me not. It is a well-known fact that 90 per cent. of the wounds of the abdomen which occurred during the war were fatal. It is fair to suppose that some of these penetrated the abdominal viscera, but many did not. In many of the cases referred to to-day the ab-

dominal cavity was not entered at all, though the abdominal walls were. In 90 per cent. of the cases where the abdominal cavity was entered, death was the result under conservatism; surely active surgery cannot do much worse.

It is a well-known fact that in cases of laparotomy where the toilet of the abdomen is well attended to, from 95 per cent. to 99 per cent. recover. If any clots of blood are left behind a large percentage will die, that is to say, recovery depends upon the thoroughness with which the toilet of the abdomen is performed. In face of this, if we are satisfied that the abdominal cavity has been penetrated, is it not proper to perform laparotomy and attend to the toilet of the abdomen even if we find that nothing else is required? If there is anything else required, attend to that also.

HORACE PACKARD, M.D.: There are two matters suggested by this discussion, already lightly touched upon, which I wish to speak of in detail. These are the use of hot and cold water, the first as a prophylactic against septic infection, and the second to prevent the germination of bacteria after infection has occurred. A high degree of heat is the greatest of all antiseptic agents, and the use of such an easily obtainable means as boiling water for the disinfection of instruments commends itself to all. No operating-room is now considered completely equipped without a sterilizing tank, in which instruments and sponges can be rendered thoroughly aseptic prior to every operation.

In spite of the utmost precautions symptoms of bacterial infection sometimes set in, much to the chagrin of the careful surgeon. It is here that cold, properly applied, works wonders. Its modus operandi is as follows: Suppose, through imperfectly sterilized instruments or hands, a culture of some form of micrococcus becomes lodged in the wound. Under the nurturing influence of the heat of the body and the débris of blood-clots and shreds of tissue in the wound, germination rapidly goes on, putrefactive fermentation is set up, and the familiar symptoms of septicæmia quickly supervene. If, while this process is still localized, the temperature of the part be reduced a few degrees, by cold applications, germination of the micrococci cells is stopped, and with this check upon their enormous reproductive power, the phagocytes of the blood are enabled to destroy them or encapsulate them and bear them safely away to the excretory channels. Nothing has given me such satisfactory results as the cold-water coil. I can truly say that I believe its prompt and persevering use has saved the lives of several patients upon whom I had performed abdominal section.

CHAS. M. THOMAS, M.D.: In closing the discussion in the first paper, I should like to consider, first, the question as to when laparotomy is to be performed, if at all.

The determination of abdominal penetration should be an easy matter. There is no reason for wasting time by going over the symptoms.

We simply have to follow the wound until we get to the peritoneum; if that be intact, abdominal penetration has certainly not occurred.

If, however, we find an opening in the peritoneum, what shall be done? Some of the members have said,—"wait till peritonitis comes on:" others, "wait till fæcal extravasation takes place, for that is what kills;" others again, "so soon as we find penetration of the abdominal cavity, go on and open it."

In reply to these widely differing views, may I be allowed to emphasize the statement of the paper, that in case of peritoneal penetration, if we are fairly well able to exclude injury to abdominal organs, we may withhold our hand; otherwise, we are not only justified in opening the abdomen, but in most instances it becomes our duty so to do.

The probability of organic lesion being established, *interference must be immediate* if it be at all.

If it be delayed until inflammation sets in, then "Hands off!" for we will in all probability do more damage by our manipulation of the matted intestines than by leaving the case to nature. I cannot understand how one who has had actual experience in such cases can advocate operating at such a time. In the few instances in which I have been unfortunate enough to have opened the abdomen during active peritonitis, I have been unable to distinguish one part of the intestines from another.

The advice to wait till fæcal extravasation has occurred is certainly very faulty, as one of the prime objects of the operation is to prevent that extravasation.

Another point made in the discussion, to which I must take exception is, that one of the important symptoms inducing one to operate in cases of abdominal injury is collapse.

I think that is a mistake. In the first place, we may have serious abdominal injury without collapse; and on the other hand we may have marked collapse without intestinal rupture or hemorrhage, and simply from injury to the abdominal nerves. So again I would emphasize the statement that shock, as a rule, cannot be depended on.

With reference to the point in diagnosis as to the presence of sudden tympanites over the region of the liver as indicating intestinal perforation, this has been met by the relation of a case in which the area of liver-dulness was obscured by tympanites, and yet the patient got well.

I cannot see that such a case lessens the value of the symptom. To my mind, the distension here was the result of extravasation of gas through an intestinal perforation, and the recovery, one of that ten per cent. that occur spontaneously.

With reference to the use of antiseptics, I should much like to hear the actual experience of the practical surgeons present. I for one should feel very unsafe without them.

[J. H. McClelland, M.D., also participated in the discussion, but his remarks have not been received.—Editor.]

REPORT

OF THE

BUREAU OF OBSTETRICS.

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CARDIAC COMPLICATIONS OF GESTATION.

By L. P. Sturtevant, M.D., Conneaut, O.

This paper is not intended as a description of the various morbid phenomena that may exhibit themselves in the human heart irrespective of age, sex and condition, nor yet of the alleged reciprocal influences exerted by them and the physiological process of reproduction. The curious inquirer will find sufficient amusement, if not profit, in comparing on these points such standard works as may be accessible. Still less is its object to discuss the treatment of pathological conditions of the heart during pregnancy. The law, *Similia similibus curantur*, while cognizant of every condition, is possessed of universal authority, and is a guide of unerring instincts whose directions it remains for us simply to fulfil accurately. Attention is solicited, however, to an inquiry into the cause of the discrepancy in the esti-

mation of peril to mother and child in which these complications are held by the two leading schools of practitioners.

In the first place, then, may be mentioned the opinion held by our allopathic brethren. Grandin's translation of Charpentier's Obstetrics, says: "In view of the fatal influence mutually exerted by pregnancy and diseases of the heart . . . . . Peter's opinion ought to be regarded as a rule which is almost absolute, viz.: Oppose marriage in a patient with heart disease; if she is married do not let her become a mother; if she is a mother, prevent her from nursing her child; and if such a person become pregnant, let her most carefully avoid fatigue, emotion, and every cause which by disturbing the pulmonary circulation, may render still graver the prognosis of the cardiac affection." Lusk more mildly states that "women with cardiac disease of any considerable gravity should be dissuaded from marriage," though he adds, on the authority of Porak, that "pericarditis has no perceptible effect upon the normal course of utero-gestation." Properly to estimate, however, the force of this last remark, you must know that Quain concedes an average mortality of not less than 16 per cent. from that disease, confessedly the least serious of cardiac lesions. On the other hand, when Peck had summarized last year the experience of our school regarding the accidental complications of gestation, he wrote: "But eight (in every hundred) have been called upon to prescribe for that difficulty," and although cases of pericarditis, endocarditis and myocarditis are alike reported, not a mother was lost. The infantile mortality, however, was 25 per cent., equally distributed between the two former disorders. The orthodox death-rate, as determined by the only allopathic figures at hand relating to the subject, is considerably above 42 per cent.

What then is the natural conclusion to be derived from a comparison of these testimonies? Barest reference only can be made to the noticeable rarity of the complication in homœopathic obstetrics as evidence that most of our practictioners know better and do better than to suppress rheumatism by topical applications of camphor or alcohol: the *discussion* of the subject belongs to the Bureau of Clinical Medicine. It is but rational to assume that the cause of such disparity of statement is to be found in the positively deleterious influence upon a pregnant woman of some drug or drugs ordinarily prescribed by allopaths for cardiac difficulties, or in the superior power of medicaments homœopathically administered, or in a com-

bination of both. Fortunately the benign influence of our remedies is so universally recognized that an examination of the second and third causes may be waived and attention directed to the first only.

There is a drug so *regularly* prescribed by the "regular" school for all heart-troubles as to expose it to the charge so often hurled against *us:* "One remedy is used for every disease." For more than three centuries, despite the ebb and flow of conflicting theories, Digitalis has maintained its position as *the* cure for such disorders. Scarcely a patient in civilized communities has escaped its administration in doses sufficiently massive to "produce an effect" as a distinguished surgeon once tersely put it. And this unmindful of sex or condition! We are even commanded to treat the disorder in the pregnant as though there was no complication. Hence it is made our duty to inspect carefully the medicines recommended. And here "regular" testimony only will be presented, for what do "irregulars" know of science? Bartholow says, "Like Ergot, Digitalis has the power to induce uterine contractions and hence it has been used successfully to arrest post-partum hæmorrhage." He furthermore adds, "The mechanism of its action is similar to that of Ergot." Four other eminent authorities, representing alike the French and the English schools of medicine, emphatically attribute these properties to this drug, two, at least, after direct accurate physiological experiment. One found it more efficacious in congestive metrorrhagia than Secale, and another reported its use as an abortifacient and a third demonstrated its powerful contractive energy over non-striated muscular tissue wherever found. Now what accoucheur would wittingly prescribe a heavy course of Ergot during pregnancy except with malice aforethought? And yet a more powerful drug has been administered by *orthodox* practitioners for many a decade since its properties were well ascertained? Was it done intelligently? Wm. Wood & Co., are respectfully referred to as competent authority in the premises.

Another drug that, until very recently, has been generally displayed by *scientific* physicians in heart disease is Potassa. Its spoliative and antiplastic influence on the blood is too well known to the youngest medical student to require more than mention. Is it any wonder then that it is a *regular* thing for our *regular* brethren to find that "Cardiac diseases show their (?) influence on pregnancy by causing metrorrhagia, premature delivery, and abortion

and by causing the death of the fœtus either directly on account of the mother's affection or in consequence of changes in the placenta," as well as the death, before five years, of a vast proportion of children who had escaped earlier destruction, not to mention a maternal mortality varying from 16 per cent. to an unknown height according to the particular disorder manifest? And this without considering the effect of fanciful side treatments of, for example, quinia, gamboge and scammony, leeches, blisters, ice and chloral! Let us be content with small, yes, minute, doses when we treat pregnant women, if we would one day say, "Mother and child are doing well."

Discussion.

L. A. Phillips, M.D: One little experience which I have had is brought to my mind by a suggestion in this paper—that is in relation to the advisability of preventing marriage and child-bearing in those having organic heart-trouble. Within a year I have had an experience in which a child, seemingly perfectly healthy, died suddenly without an hour's sickness, not having been seen by a physician in connection with this sickness, if it could be called illness at all, which preceded its death, and with no apparent cause for its sudden demise. On investigation I learned that though the mother had, during my acquaintance with her, no apparent disease of the heart, she had in her earlier days, that is at about the age of puberty, suffered greatly with heart-difficulty, said to have been functional, and probably it was, for I had seen no evidence of an organic disease at that time; but the peculiarity in her case is that since the death of this child she has developed a decided valvular disease of the heart, and is now herself in a precarious condition from that cause. I am sorry to say she has again become pregnant and I anticipate serious results for her as well as to the prospective child. I have nothing whatever to offer in regard to the treatment of this condition, except to advise prevention or avoidance of child-bearing, and I only am led to relate this case in order if possible to bring out further discussion of the question.

TRAUMATIC COMPLICATIONS OF PREGNANCY.

By Sheldon Leavitt, M.D., Chicago, Ill.

Among the questions which confront us in pregnancy, is that concerning the risk of premature expulsion of the product of conception arising from traumatism, whether accidental or surgical.

We may look at the subject from several sides, but the view which we now design to take of it is the surgical. Conditions occasionally arise, which, in a non-pregnant state, would indicate surgical interference, and the weight of the contraindication presented by pregnancy must be known in order that an intelligent opinion concerning the advisability of an operation, may be formed.

The chief danger arises from reflex effects on the uterine muscular fibres, expressing themselves in immoderate contraction. But there are other dangers, namely, destruction of fœtal life from maternal hemorrhage, and likewise from maternal toxæmia.

In considering the first of these risks, we ought to recollect that the uterus is not at rest during gestation, but is in rhythmical contraction. Throughout the greater part of pregnancy, this organ, as we can easily demonstrate, never wearies of contracting and relaxing at tolerably regular intervals. Labor itself is but an intensification of this action. This truth being recognized, we readily see with what facility irritation, applied to certain parts of the body, may, by reflex-action, augment uterine energy and precipitate expulsion of the immature ovum.

The womb, like other organs, responds much more promptly to irritation existing in one part of the body than in another; and, therefore, extensive traumatism can be inflicted with comparative impunity over certain areas, while rapid effects follow interference with others. Then, too, in some women, the reflex-function is on the *qui vive*, while in others it is extremely lethargic.

Little experimentation is required to determine that stimulus applied to the mammæ, the external genitals, the anus and the uterus

itself, quickly excites the uterine muscles. Accordingly, it has been found that operations, involving these parts, are more frequently succeeded by abortion.

When women are in a state of health, and free from morbid predisposition, normal pregnancy is not easily interrupted. Matthews Duncan mentions a case wherein an intra-uterine stem pessary was introduced, and worn for some time during pregnancy, without exciting miscarriage. A woman, seven months pregnant, jumped from a third-story window to the pavement, without suffering abortion, though she broke both legs and both arms. Operations of all degrees of severity have been performed with immunity from the result in question: Limbs have been amputated, ovaries have been removed; the vaginal portion of the cervix uteri has been cut off, and subserous fibroids have been taken away by laparotomy. Aye! when women, such as the subjects of these accidents and operations set about procuring abortion, they and their accessaries are sometimes driven almost to desperation by the futility of their efforts.

On the other hand, a slight strain, or an insignificant wound, in certain women is sufficient to precipitate uterine evacuation.

In a woman who has no disturbance of functional activity, no depreciation of vital energy and no morbid predisposition to miscarriage, pregnancy is interrupted only by certain efficient causes operating at a favorable moment. To such patients irritation may be strongly applied for a brief period, without harmful effect; and it seldom becomes overpowering unless unusually prolonged. They may fall down-stairs, or they may be incised in vital parts, and still hold tenaciously to their immature progeny. But even such women will finally yield, though with reluctance, to the cumulative force of reflex-energy set in action by irritation of long continuance.

Again, the monthly molimen is, during pregnancy, not wholly suppressed, but only under restraint; and influences which, at other times, would be innocuous, are, at that particular period, capable of doing serious harm. For this very reason, women with a propensity toward miscarriage, require to be held in check, or put into strict quarantine at such times.

But what can be said of those who, from a slight shock, a high tep, a long walk or a stirring emotion, to say nothing of severe aumatism, cast their untimely fruit? They make large drafts on

our time, our patience, our ingenuity, our tact, our skill, our discretion and our sympathies, even in their best estate.

Apart from reflex causes of abortion after accidental or surgical injury, we ought not to forget that uterine evacuation may be brought about from harm accruing to the fœtus through maternal blood-loss, uterine congestion and general maternal toxæmia. Prior to the operation or injury, the woman may have been anæmic, so that a sparing hemorrhage would so impair fœtal nutrition, already low, as to extinguish life. Again, strong uterine congestion may rupture some of the finer decidual vessels, and destroy the functions of so large a part of the placenta, that fœtal life can no longer be sustained. Finally, inasmuch as the fœtal blood is aerated by the maternal blood through the process of osmosis, it follows, as a necessary consequence, that profound toxæmia of the mother has a marked effect on the unborn child. It can bear a certain degree of contamination without fatal result; but, as with us, in vitiation of the atmosphere by poisonous gases, when that certain point is passed, it falls a prey to the baneful influence.

To recite cases wherein serious operations were performed during utero-gestation without interruption of its course, would profit little. They are by no means numerous in the practice of any one physician, and sound deductions can scarcely be drawn from my note-book or yours. Cohnstein, who devoted considerable time to the study of this subject was enabled to collect sufficient *data* to establish a fair view of the danger of miscarriage which awaits upon serious traumatism. He says, that, in 54.5 *per centum* of all cases, pregnancy goes on to a natural termination.

As evidence of the wonderful tolerance exhibited by some pregnant women, we may cite a case related by Frommel, in which a subserous fibroid, with a sessile base, occupying considerable of the uterine wall, was removed. Convalescence was protracted by iodoform poisoning, but pregnancy continued an uninterrupted course. The physical state of his patient, and her environment as well, must have been of the most favorable kind.

TREATMENT.—Reflex effects can be greatly diminished by the employment of anæsthetics, and that, too, without special danger to the fœtus. Ether is oftenest the chosen agent, but I am convinced that its effect on the child is more pernicious than that of chloroform. The latter anæsthetic seems peculiarly adapted to the pregnant woman,

and, by general consensus of opinion, its dangers in midwifery practice are but a remove from *nil*. Then, too—and this is a consideration of some weight in this connection—vomiting is less likely to result from its administration.

The best prophylactics are the antipsoric remedies, and, in my opinion, prominently, *Sulphur* and *Calcarea carb.* Temperament and general *physique* are the best indications upon which to base our selection.

Sulphur.—For women of nervous temperament, inclined to be thin and narrow-chested. Skin rough; sense of weakness through the pelvis; flushes of heat and frequent faintness. Previous history of sparing flow at the month.

Calcarea carb.—Leuco-phlegmatic temperament, fair complexion, inclined to stoutness. Clumsy; feet cold and damp. Previous history of profuse flow.

There are many other remedies for use before and after traumatism, among which should be mentioned *Arnica, Hypericum, Caulophyllum, Secale* (neither of the last two lower than the 3x), Pulsatilla, Arsenicum, Gelsemium, China, etc. Moreover, I would not hesitate to appeal to *Opium* for its soothing effects after severe traumatism, just as I would to Chloroform or Ether during the operation.

CONCLUSIONS.—1. Cases differ in their proneness to miscarriage, and that often, without the proclivity being recognizable before surgical interference.

2. Women giving evidence of quiet and orderly reflexes, with no history of abortion, are the most hopeful subjects.

3. Operations on or about the generative organs are most likely to provoke an interruption of pregnancy.

4. Taking cases as they present, it has been found that the majority of them continue an uninterrupted course.

5. There are three weighty considerations respecting the advisability of interference; (a.) Is the existing irritation, if continued, more dangerous than the briefer shock of an operation? (b.) Will labor be seriously complicated by the existing conditions? (c.) Will delay endanger life through extension or growth of the lesion. If these questions are answered affirmatively, and conditions seem favorable, then the operation ought to be undertaken.

6. The best time to operate is midway between what would have been menstrual returns.

7. Under homœopathic care, both before and after operative procedure, the probability of uninterruption of pregnancy is rendered decidedly more promising.

DISCUSSION.

L. C. GROSVENOR, M.D.: I was very much interested in the paper, and think it an excellent one. In speaking of abortions, it called to my mind a case that occurred to me a year or two ago, where I was called to a case of labor only to find the lady about to miscarry at seven months. She had pains at regular intervals during the night; the os was fully dilated and as large as a silver dollar or larger, flexible and soft as could be asked for. On examination, I found it a footling case, the sac containing a foot and ankle presenting to the world. I knew the lady very well; knew her to be a perfectly healthy woman, and had attended her with seven children. I had had some remarkable results in the use of Opium—Bigelow's preparation—in arresting miscarriages in other cases, and I said to myself, there has been no hemorrhage here, and the sac is intact. I am going to see just what I can do with Opium. It will do no harm. I will see if I can arrest this miscarriage at this advanced stage. I gave her a dose of Svapnia, ¼ to ½ gr., as I usually do, and in thirty minutes the pains had ceased entirely, and she quietly went to rest; the next morning the whole had retracted and the os closed partly so that it was no larger than a twenty-five cent piece. Next day the os was still nearer closed up. Two months later I attended her at full term, and not as a footling case, but with a vertex presentation. It was an interesting case to me at that time, and illustrated to me what I have since, and even before, been doing over and over again in arresting miscarriages. I think that almost all miscarriages can be arrested before the escape of the amniotic fluid or the placental attachments have begun to be separated by the uterine contractions. I think we can almost always arrest a miscarriage under these conditions with Svapnia or Bigelow's purified Opium. I say almost always, if the fœtus is healthy. If the child has lost its life, then it is a foreign body, and the miscarriage must very soon go on. But you have given her a chance to carry her product right along if she is in health. Another point is in regard to Chloroform. I have used Chloroform in labor for twenty-two years. I have given it as many as eighty-six times in a year in the lying-in room. One of the best physicians and accoucheurs in the country, makes this statement with regard to Chloroform: That the lying-in room is an eminently safe place for the use of Chloroform, and I apprehend the reason of that is that, in labor, there is a toning up of the whole system, and with it a toning up of the heart's action, and there is, therefore, less liability to arterial failure following the

use of Chloroform in labor than in surgical practice. It is very much to be preferred to Ether in the lying-in room. It is sometimes claimed that Chloroform predisposes to hemorrhage, but I believe that to be fallacious. I have given it for twenty-two years in the lying-in room, and have given it more and more every year, and I have yet to have my first case of hemorrhage.

GEORGE R. SOUTHWICK. M.D.: I can hardly let the opportunity pass without saying a word in regard to the use of Chloroform and Ether in obstetric practice. I have seen a great deal of both in a large number of cases, and have been where Chloroform has been used extensively, and also Ether. I have tested them both in practice, and I must say that Ether has been, in my experience, far the better of the two. Chloroform is more easily given, it is pleasanter for a patient to take, and where you only want a slight or temporary anæsthesia, is good enough. But, for serious operations or profound narcosis, I prefer Ether.

NERVOUS COMPLICATIONS OF GESTATION.

By Emily V. Pardee, M.D., South Norwalk, Conn.

(Continued from Report of 1887.)

Last year I tested your patience by reading before you a paper upon the lesser of those nervous affections which complicate pregnancy, excluding the more serious ones, as hysteria or eclampsia, mania or insanity, and chorea.

I believe I remarked at that time that each of these maladies deserved an entire paper, whereupon I was invited to continue with these subjects to the bitter end, and in the groove of personal experience rather than scientific exploration, which is my apology for standing before you to-day. An obscurity prevails regarding the anatomical origin of this class of diseases, and the rare autopsies which have been made upon those subjects who have died of, or with, these complications have been either negative, or so discordant as to be unsatisfactory and unreliable.

One fact common to all neuroses is that their course is, fortunately, an interrupted one, marked by paroxysms and intervals of exemption.

The general predisposing cause of all neurotic maladies is a highly emotional temperament, fright, sudden shock, debilitating diseases, surroundings of depressing nature, or in fact anything which weakens the body and agitates the mind.

Speaking firstly of hysteria, Webster says: "Hysteria is a certain kind of nervous fit with which women are sometimes affected;" and certainly the correct pathology of this disease is obscured by the name, which implies some affection of the uterus, while every general practitioner knows that it is not confined exclusively to women, but that men of sedentary habits who live indoors are often victims of this "certain kind of fits."

I have always felt sorry for the uterus, so many ills are unjustly attributed to it. It seems to be to women what worms are to chil-

dren—a convenient kind of scape-goat to saddle with diseases of which we are doubtful or ignorant.

The hysteria peculiar to pregnancy is, I acknowledge, limited to women, and is quite different from the hysteria of the non-pregnant. It is an axiom that in pregnancy the mind is peculiarly susceptible to morbid impressions, but I have usually found the hysteria of pregnancy due to pressure or displacement of uterus, or abrasion or irritability of the genitalia with a dry, glistening inflammation, which soothing lotions, in conjunction with carefully selected remedies, would aid.

Dr. Guernsey says: "One needs to distinguish between irritable uterus and hysteria," but it seems to me that the condition of irritability induces the hysterical symptoms, and curing the irritation aborts the hysteria. Hysteria in itself is not considered dangerous; I mean dangerous to the patient, but it is sometimes extremely disastrous to the physician, as the occurrence of the malady often surprises the young practitioner, who is quite likely to do the best thing with his or her first case, and the importance of treating these cases successfully is really as vital to the physician and the alarmed friends as to the patient herself; and then, many times, though you be wise as a serpent and harmless as a dove, a modest little boy (we have all seen him) will have a note at your office the next morning to the intent that—"Madam is so much better your services are no further required." The symptoms of an attack are legion, but among those most frequently encountered are strangling, choking, screaming, writhing, sobbing, meaningless laughter, unjust accusations against friends, and often undue affection for the doctor. The attacks are of uncertain continuance, and are sometimes so aggravated as to produce convulsions.

Occasionally the appearance of hysteria is a forerunner of mania, but if we are called early our homœopathic remedies ought promptly to avert such an accident. Asafœtida, Gelsemium, Hyoscyamus, Mag. carb., Moschus, Ignatia, and Pulsatilla are all grand remedies, and quick to respond if rightly chosen. A stimulating drink is often an auxiliary. When called late to a case, and the patient is all worn out, it is sometimes policy to give inhalations of ether to arrest the spasmodic action that sleep may ensue; by persistently anticipating a renewal of attack, with this anæsthetic you may subdue it entirely. Should all else fail, and paroxysms be protracted and severe, an

emetic, producing vomiting, will shorten the paroxysms, and consciousness and good manners will return to conclude the case. In all cases of hysteria withhold expressions of sympathy, and as far as consistent seclude the patient. A quiet talk, or a little local gossip with the attendant, evincing no anxiety for the patient, will sometimes prove an effectual eye-opener.

In my opinion many of the cases called puerperal hysteria are properly nostalgia, or nostomania—an unconquerable desire or infatuation for home, to the exclusion of sound reasoning. The young girl, removed from home and associates when about to become a mother, often yearns for just what nothing outside of the old home can supply, and, although this disease is ridiculed by some and scarcely recognized by other physicians, yet it is a well attested fact that boys, as well as girls, have fought it in vain in boarding-schools, while in a standing army, or in hospitals, it is not an uncommon malady, producing waste of tissue and hectic, and has in many cases proved fatal with strong men.

Dr. Chowne stated in the London *Lancet* that "when the conscription in France was compulsory the French army in seven years lost ninety-seven men with pure nostalgia." One strongly marked instance of this disease, which I attended, was a lady who, when quite young, married an elderly widower, and suffered intolerable despondency during her first pregnancy, which, as labor approached, developed into a delirium; in her frenzy she abused her attendants, and wildly begged to be taken home, screaming pitifully and constantly for her mother; this condition entirely ceased with the birth of her child, and she made a goodly recovery and also a goodly number of apologies for her unkind behavior. Although less melancholy during her second pregnancy, and deploring with shame her former bad conduct, she played the same role just preceding and during her second labor, only that I was less alarmed and better fortified with my defences, holding her under anæsthetics; but, for nine long hours, every time I withheld the anæsthetic she would rave and abuse her attendants, calling us cruel murderers, and, with real tears and pitiful cries, would implore her mother to come and take her home.

Another young woman became so uneasy and melancholy in the early stage of her pregnancy that her husband, finding her always in tears and longing for home, was obliged, in the sixth month, to bring her from her pleasant home, in a distant city, to her old home,

which was cheerless, and placed her under my care; in spite of all my attentions and medications, with the counsel of experienced obstetricians, she grew steadily worse, and developed at delivery a marked mania, which also resisted treatment, and a few months later she died in an insane asylum.

A third case all through the weary months of gestation begged for her home and her mother, but circumstances forbade the indulgence; early one winter morning, when her labor began, this longing, with foreboding tendency, became so intensified that her mother, whom we thought could arrive by ten o'clock, was telegraphed for; when the ten-oclock train arrived she had been in good progressive labor for five hours, the occiput presenting beneath the pubic arch; but when she found her mother did not come her pains died away, only to be renewed when the carriage was sent to the 2 P.M. train; it now seemed that each contraction must conclude the struggle, when the carriage was driven back from the station without her mother; again her pains died away, and another tedious wait ensued until the 4.30 train was due; then, as the carriage came in view with the mother, the violence of her pains was redoubled, and, amidst hysterical sobs and cries, the child was born before the mother reached the door. She certainly learned to labor and to wait, but I think, if Longfellow had been her accoucheur, he certainly would have emphasized the first line, "Let us then be up and doing."

Convulsions.—The convulsions of pregnancy that might be reckoned as nervous are not so frequent or so much to be feared as those arising from organic diseases, and are oftentimes the continuation of hysteria, but where they do appear suddenly without hysterical forerunners it is difficult to decide in a moment which variety we have to deal with. In either case the first indication is to relieve the spasmodic action and prevent a return. If this consummation, so devoutly to be wished, is quickest secured by Ether, we will not dread such means, but administer it immediately, for, "If 'tis well when it is done, then 'tis well if 'tis done quickly;" meantime carefully decide upon your remedy and give as soon as practicable, and unload and stimulate to activity every organ. These nervous convulsions more frequently afflict the primipara than multipara, more frequently appear in the later stages of gestation, and more frequently with small, compactly-built women, who carry large children and large quantities of amniotic fluid; in one of the latter kind I once blundered

into relief by rupturing the membranes, preparatory to inducing labor, when all spasmodic action ceased and I was not compelled to hasten, showing conclusively that the irritation was dependent solely upon pressure.

There are cases of imitative convulsions. Dr. Carrol, in speaking of the possibility of such contagion by force of imitation, says that a woman in the lying-in hospital of Madrid was "seized with eclampsia, whereupon two or three others evinced the same symptoms" and he was obliged to clear the ward before the patients would recover. I once experienced a peculiar instance of this kind; two young wives lived opposite each other with a park intervening; both placed their delivery upon the same date, and very naturally watched each other critically. No. 1 was, without warning, seized with frightful convulsions at just the time she expected to be sick. I called assistance and in a few hours we induced labor and delivered her of a dead child. She continued in a comatose state for a period of 56 hours; this proved to be from Bright's disease. Of course the whole neighborhood was agog, and my lady across the park amused herself by watching proceedings and listening to descriptive details from thoughtless neighbors, and was the next night herself confined; her labor was rapid and safe and she was delivered in a few hours of a fine child, when I gladly hastened home, hoping for rest; scarcely in my bed, when a message came that No. 2 was in convulsions; hastily returning to her bedside, a glance verified the messenger's statement; I assure you I felt as Eli Perkins did when the tree under which he sought refuge from a storm was struck by lightning—"somewhat discouraged." I never knew just why I was not frightened, for there was no diagnostic sign that I could describe to you, but a serio-comique expression of satisfaction on her distorted face which seemed to say, "I am not to be out-done by my neighbors." I gave Hyos. and assured the family that her trouble was, I thought, purely nervous and not similar to No. 1, and even told them they might retire as it was not necessary for any one to remain up but the nurse and myself. Upon this she succeeded in doing quite a fine convulsion wonderfully similar to her neighbor. I gave the Hyos. every five minutes, and assumed to sleep between the doses; as soon as she saw she had a small audience and no admirers she ceased her convulsive efforts and went to sleep. I believe now that if she had been encouraged she would have run through the night with mock or imitative convul-

sions; and if her family had not had faith enough in me to be controlled, I think she would have led us a night of sorry experience. As far as the family were concerned, I don't see why it was not a genuine faith cure.

Mania or Insanity.—Of puerperal mania or insanity, with its usual variations, volumes might be and have been written; each individual case presents personalities common only to itself, and the detail of treatment needs to be as varied as the symptoms expressed. The invasion of this disease resembles death in that "it has all seasons for its own;" it may come quietly with melancholia or furiously with delirium or as permanent madness; but it lessens my task to have to speak of those cases only which appear during gestation and not of the more frequent cases which arise from shock of hard labor or depleting lactation, and so are of post-partem occurrence; the cases occurring during gestation are more grave than those happening at parturition or after delivery, and are liable to be aggravated by labor and settle into permanent insanity, especially where an hereditary disposition exists; the tendency to repetition of abnormal processes is a troublesome fact and the knowledge of a former attack should keep a physician on picket duty, and than Cerberus at Pluto's cell more watchful.

I have one patient who has suffered with a rather mild harmless attack in ten successive pregnancies; these attacks usually commence at about the seventh month and continue till the child is ten days or two weeks old; at the worst they are a simple, senseless, wandering and muttering delirium; no pelvic deformity or hereditary predisposition exists. No hysteria or violence is manifested, but the repeated attacks have so weakened her mind that she is vacant and senseless. Hyos. is the only remedy that has been useful to her, and no tripod exists to rest even that prescription upon. It is popularly known that the bodily health may be perfect while positive mania exists, and, after careful post-mortem scrutiny upon those who have died, not *of* the disease, but while suffering from the same, experts have declared that no lesion or structural change exists throughout the nervous system, and on the other hand we know that where the mental faculties have remained intact to the last, post-mortem examinations have not infrequently revealed changes in large portions of the brain, but I believe that many a functional disorder left to itself will in time induce structural change.

Puerperal mania seldom terminates fatally. During its course the impulses are frequently immoral; the sense of modesty is weakened; and the language often indelicate and irreverent; the natural affections are leaning to indifference and unconcern for the offspring and the propensity to do violence to the child possesses the unhappy mother's mind. Occasionally one will implore protection for her sake and express her desire to be restrained from violent acts; in these trying cases as in many another, the physician's duty is manifold; we should assume never to be disturbed by the commotion and on no account to appear surprised by any act or expression of the sufferer. We should avoid expostulations; be uniformly kind, yet not sympathetic; we should demand a light, bland and nutritious diet, good air and rest, the exclusion of garrulous neighbors, and the devotion of one discreet attendant who ought, under penalty of the guillotine, never afterward to repeat, either to the patient or any one else, the possibly silly or vulgar expressions. As soon as consistent with the bodily health of the patient, advise her withdrawal to a sanitarium or a hospital where we may reasonably expect the mental phenomena will be dispelled; and here again we need to exercise discretion; many a patient's life is sacrificed by being hastened from her home when unable to travel. Dr. Talcott, of Middletown, says: "About 75 per cent. of puerperal cases recover; the balance usually die very soon after admission to the asylum, which they often reach in a greatly exhausted condition, showing the need of more careful judgment on the part of those sending them. Let us remember this, however impatient we may feel to get such cases off our hands, and into better."

Chorea.—Of chorea I will say but little; I doubt if there is any practitioner here who knows less about this disease as a complication in pregnancy than I; and the reason I know so little about it is because I have been reading up upon it; experimentally I know nothing, having never seen a case during gestation, and my knowledge of it has increased in inverse ratio as I read. I have written to twelve obstetricians for facts and only one ever saw a case; this one reported two cases in her own practice; the one occurring at the third month and so violent that it was with difficulty she ate food enough to sustain her, and they were obliged to bandage her limbs in order to afford her any rest from her violent efforts; three months of careful medication only modified her condition, when suddenly all

movements ceased and she had no return until her next pregnancy when the same trouble recurred at about the same period; she now received Caulophyllum 3x with marked improvement, and at the end of three weeks she was entirely free from any symptoms of the disease; the second case had suffered with chorea previous to her marriage, once from fright and again following an attack of rheumatism; the nervous disturbance occurred at the seventh month of pregnancy; she received Tarantula 12x, principally, and also a few doses of Sulph., Coffea and Belladonna. She was well before her labor. An old-school authority, says: "Chorea rarely occurs before the second month of pregnancy and is equally rare in the latter half term, but once established it usually lasts until after delivery." Some authorities believe that chorea is an affection of the excito-motor system and produced by eccentric irritation, and others that it is essentially functional. Dr. Radcliffe holds that the phenomena of morbid muscular contraction are in every instance the direct consequence of some depression of the entire vital powers, and not the result of any change or irritation to the nervous system; one concomitant symptom of this disease is blushing, and even writing on this subject has produced that symptom with myself. The best authorities in both schools have pronounced plain chorea, separate from gestation, "obscure;" then what can I say of the combination? Most reverently and for self-evident reasons I will not lift the veil that hides it in "Cimmerian darkness."

Discussion.

Sheldon Leavitt, M.D.: I have but a word to say concerning the chorea of pregnancy. I had one such case under my care who came to me from old-school treatment, and was, as I recollect, about the sixth month of pregnancy. She had received a large number of hypodermic injections of Fowler's solution of arsenic. She said they had tortured her nearly to death, but the disease had been in no way improved. Her condition was pitiable. She could scarcely lie upon the bed when awake, her writhings and contortions being of the most violent kind; but during sleep, she would many times have comparative quiet. This went on, and under treatment she seemed gradually to improve; but, nevertheless, did not recover from this choraic condition at all during gestation. I expected to have a serious time with her during labor, but, fortunately, she seemed then to be under better control than at many previous times, and passed through the labor safely and satisfactorily. There were some

choraic movements for a day or two following delivery, but they rapidly passed away and the patient made an excellent recovery.

A. J. FRENCH, M.D.: I had, early in my practice, two very marked cases of monstrosities, illustrating very strikingly the effect of the psychical influences over the physiological functions of the uterus, upon the fœtus. I attended a woman in labor at full term; the labor was normal, but the fœtus was a perfect mermaid—head, chest, and body perfectly formed, while, instead of the lower limbs, a perfect tail of a codfish, representing the lower third of the fish. The patient, when about two to three months pregnant, stepped upon a fish and was badly frightened.

Another case of full-term labor showed nothing abnormal until the head presented; this head was of the form of that of a large bull-dog. The mother said she had been frightened early in her pregnancy by coming suddenly upon a large dog. As we see these cases only when called at time of labor, I know of no way to prevent them.

DR. GROSVENOR: The doctor who has last spoken says, "of course, we can do nothing." I don't believe he really means that. My thought is this, that where a matter of that kind occurs, the moral power of the physician can put the lady in such condition that the harm can be largely obviated; that during the remainder of the gestation her mind can be disabused of this fear; assure her that statistics show that the cases of deformity following such fright do not happen once in a thousand times. Now, in line with Dr. French's cases, I desire to speak of one of spina bifida, where two of the bones of the spinal column were imperfect, and the resulting tumor presented a perfect picture of the posterior aspect of a fat hog. There were the two hams, the rudimental caudal appendage, the cul-de-sac beneath, and, in a word, a perfect representation of the hog. Those cases of spina bifida, as you know, rarely live longer than two or three weeks, and then die with convulsons. On getting the history of the case I found that in the earlier stages of her gestation she was going along the street and turning the corner, near a meat-market, ran against a frozen hog, standing on all-fours, and the shock was such that she worried all through the remaining part of the gestation about it.

Our duty is to pleasantly occupy the mind of the lady with aspirations for a more exalted motherhood. I do believe that we can do very much to prevent harm in these cases. As Dr. French has just said, in cases where the doctor is not called in till the moment of delivery, and does not know of such matters until the birth of the child, we have no opportunity for service in this direction. Here is where we are greatly at fault. We should so educate our patients that they will place themselves in our care in the early stages of gestation.

DR. PHILLIPS: I have one case of chorea to report, and the only one in my experience occurring during gestation, and that was in the last month of pregnancy, and was confined to the lower limbs. The muscular twitching was worse always during sleep, but present, more or less, night and day. This case was permanently relieved by Cuprum acet.

L. L. DANFORTH, M.D.: This recalls to my mind the case of a lady who was brought to me for a diagnosis. She was supposed to be pregnant, and to have gone long past the full term of gestation. A nurse had been kept in the house for a month awaiting the expected event. But no baby came. It was a case of pseudo-pregnancy. The strange part of it all was, that the lady had menstruated regularly each month, although scantily. She had grown stout, generally over the whole body, but particularly in the abdominal walls. Encouraged by her physician to believe that she was pregnant, and being of a highly nervous temperament, her symptoms soon corresponded with those of pregnancy. Movements of the muscles of the abdominal walls came on, which were supposed to be due to movements of the child in utero. The jerking of the muscles became almost continuous, and were lightning-like in rapidity. The movements were in the direction of the oblique muscles, first on one side, then on the other. They were present during sleep as well as during waking hours. No other muscles of the body were affected, except only slightly the muscles about the eyes. This was a marked case of *chorea*, in spurious pregnancy, and subsided gradually soon after the patient was assured that she was not pregnant.

PULMONARY COMPLICATIONS OF GESTATION.

By T. F. H. Spreng, M.D., Buchanan, Mich.

Pneumonia.—Aside from pulmonary congestion, œdema, and hemorrhage, the acute affection, pneumonia, according to all authorities, deserves special attention both on account of the gravity with which it is impressed upon the pregnant, and its influence on gestation.

There is no stage of gestation in which a woman is exempt from pneumonia. Rican and Devilliers assert that only pregnant women are predisposed to it, and that by reason of the changes which pregnancy causes in the composition of the blood, especially the excess of fibrin.

Of all the acute inflammations of the envelopes, or of the parenchyma of the organs, pneumonia is, without doubt, one of the most likely to produce abortion or premature labor. The important fact, deduced by observations made by various authorities, is, that pneumonia is almost sure to cause abortion, and that a large percentage of women die. M. Grisolle has himself observed four cases of pneumonia in pregnancy and collected the details of eleven others. Of these fifteen women, ten had not reached the sixth month, and four aborted the fourth, fifth, sixth, and ninth days from the commencement of the attack. In three cases the abortion was followed by diseases of the lungs of the severest character, all proving fatal three or four days after; only one, whose pneumonia was limited, recovered without serious symptoms. The six who did not miscarry died without exception during the progress of the disease.

Of the five women who had reached an advanced stage, two were seven months pregnant when attacked with pneumonia; one was delivered prematurely on the twelfth, and the other on the fifteenth day, both dying two days after. The three others were in their ninth month; two were delivered of living children on the seventh and eighth day of the disease; the other died undelivered on the fifth day.

From these figures we conclude that abortion usually follows an attack of pneumonia during pregnancy. I think, says M. Grisolle, that its disastrous influence is explained by the importance of the organ affected, by the gravity of the disease, the intensity of the general reaction, and the numerous sympathetic disorders which it produces in all the functions, much rather than by the paroxysms of coughing.

Prognosis.—This must be considered from both the child's and the mother's standpoint.

1st. The fœtus. We have observed that pregnancy is frequently interrupted, and, as a result, the life of the child is sacrificed. The prognosis, then, is exceedingly grave; possibly not so much so during the last months, but always very serious.

2d. The mother. While the prognosis is not nearly so grave for the mother as for the fœtus, it is, nevertheless, extremely serious. Let us refer to statistics from various authors. Grisolle reports a mortality of 92.8 per cent.; Rican, 35.8 per cent.; Bourgeois, 75 per cent.; Wernich, 21.1, and Chatelain, 39.

Dr. Peck, in the TRANSACTIONS of the American Institute of Homœopathy, Session 1887, page 398, gives the observations of nineteen physicians, and presents a maternal and infantile mortality alike of 14.28 per cent. The effect upon the mother of the expulsion of the fœtus does not seem to be favorable, for, out of eighty-two women who miscarried, fifty-eight died, while only sixteen deaths occurred among seventy-four women who did not abort. Writers differ as to the advisability of producing abortion upon women afflicted with pneumonia. Some affirm that abortion is followed by the resolution of the pneumonia; others contend that the sudden change of pressure within the thoracic cavity, resulting from the rapid emptying of the uterus, must inevitably produce fatal pulmonary œdema.

We have the utmost confidence in our remedies, and believe that by applying them, according to the law *similia similibus curantur*, we will not be obliged to resort to any other measures, no more so than in the pneumonia of the non-pregnant.

Pleurisy.—Pleurisy is an exceedingly infrequent complication of pregnancy. While pneumonia is one of the most serious complications of pregnancy, pleurisy, strange as it may seem, does not appear to

affect the course of gestation, nor the life of the mother, except it be in exceptionally severe cases.

Pleurisy during pregnancy does not differ from ordinary pleurisy except that the dyspnœa may be greater, which is caused by the enlargement of the uterus, especially during the latter months of pregnancy. The disease pursues its usual course and neither influences nor is much affected by pregnancy.

The prognosis is generally favorable for both mother and child.

The treatment is not unlike that for ordinary pleurisy.

Phthisis.—Pregnancy exercises a marked influence upon phthisis. Some authorities hold that this influence is beneficial, while the great majority regard it as injurious, especially if this afferent cause is combined with other predisposing ones, such as heredity, malnutrition, exposure to cold, scrofula, pre-existing pleurisy, hard labor, repeated pregnancies, etc. Gaulard in his thesis on pulmonary tuberculosis, declares that anæmia is the rule in pregnancy, and states that four opinions are still held by scientists regarding the relations between phthisis and pregnancy, viz.:

1st. Pregnancy checks the development of phthisis or arrests its course after it has already begun.

2d. Pregnancy accelerates the progress of tuberculosis.

3d. Pregnancy really aggravates the disease, but the latter undergoes marked amelioration during the early months.

4th. Sometimes pregnancy interrupts and seems to arrest the course of the disease, sometimes, on the contrary, it aggravates and hastens it.

These various views have their eminent supporters. Among those who hold that pregnancy checks the development of phthisis or arrests its course after it has already begun, are Cullen, Borden and Sims.

Among those who champion the second view, viz., that pregnancy not only does offer no resistance to the development of phthisis, but on the contrary it hastens and aggravates the course of tuberculosis, are Gaulard and Caresme. The former reports thirty-two cases in which the disease existed before conception, in twenty-five of which the patient's condition was aggravated, and collected eighty-four cases in which it developed during pregnancy and was evidently aggravated by the same.

3d. Pregnancy aggravates the course of the disease, but the latter undergoes a marked amelioration during the early months. This view is held by Gardien, Capuron, Pidoux and Peter.

4th. Portal, Andril and others advocate the more eclectic view, that pregnancy sometimes interrupts and seems to arrest the progress of the disease, sometimes hastens it.

To show the duration of the disease Lebart has presented the following statistics. Death occurs in 12 per cent. within three months, in 20 per cent. within six months, in 44 per cent. between six months and a year, and in 24 per cent. between one and six years. The same writer avers that the influence of pregnancy upon tuberculosis is most marked between the ages of twenty and thirty and draws the following conclusions.

1st. Latent tuberculosis in young girls most often appears after marriage as a result of pregnancy, either the first or subsequent one.

2d. In exceptional cases the health in tuberculous women is not affected even by repeated pregnancies; in some instances the children are feeble, a certain proportion dying early.

3d. Advanced phthisis usually prevents conception; incipient phthisis does not prevent it, and the pregnancy goes on to full term.

4th. Abortion, pregnancy and the puerperal state, determine the development of phthisis, in at least three-fourths of the cases.

5th. Children born of a phthisical mother are generally feeble; they often become first scrofulous, then tuberculous.

It is now a well-established fact that, as a rule, pregnancy exercises a distinctly unfavorable influence on pulmonary tuberculosis.

The Influence of Phthisis upon the Offspring.—This is less pronounced, though in many instances it is undoubted. Bourgeois noted 96 living children among 124 tuberculous mothers; 36 infants continued in good health, 60 became scrofulous, and 22 died of tuberculosis before their seventh year.

A tuberculous mother ought never suckle her child. As a rule, however, such a warning is not necessary, since the function of lactation is rarely established in tuberculous women.

Discussion.

Dr. Grosvenor: This reminds me of a case of pneumonia in the gestating woman at the seventh month—one of the most severe cases of pneumonia I have ever had, and but for the fact that she was entirely loyal to me and gave me notice of her illness early I think we should have lost her; but she recovered and went to the end of her

term and gave birth to a beautiful healthy child. But the pneumonias of gestation and the pneumonias following the lying-in are wonderfully like the pneumonia developed in the drunkard in their severity and in the course they run.

T. G. COMSTOCK, M.D.: In a large experience in midwifery practice, it has been my good fortune to rarely meet with cases of pneumonia during gestation. Whenever it occurs it is a very serious matter, and is always dangerous. I can only call to mind three cases in my practice, and they fortunately recovered. I have seen it follow abortions in young women, and prove fatal. Regarding the development of phthisis during pregnancy, in my experience the advent of pregnancy temporarily arrests the progress of the disease but immediately after labor the tuberculosis is apt to go on rapidly to a fatal termination.

PLACENTAL COMPLICATIONS OF GESTATION.

By J. B. Gregg Custis, M.D., Washington, D. C.

I do not know what I ever did to Dr. Peck, that he should have given me this subject, but since coming here I have learned that these are the subjects that he did not want to write upon himself; so, as a puzzle for his members, he gave them out by lot.

I must admit that I have had but little experience with diseases of the placenta; in fact, I have considered my duty done when I freed the womb of it, and beyond being sure that "I had it all" have not even noticed the number of knots, that I might foretell the limits of the family; so let us now thank the doctor for opening such a fertile field for the imagination.

The following is a summary of what I have gleaned from the experience of others:

We will confine ourselves to the study of the fœtal placenta; there is a possible inflammation of the maternal placenta, which is really an endometritis, and to this is due the organized adhesions which we sometimes meet with. Inflammation of the fœtal placenta is a possibility, but for myself I doubt its existence until after the escape or death of the fœtus, unless it can be the result of violence, which has caused congestion of the uterus and of the placenta, with hemorrhage. In some cases of abortion the ovum bursts, the fœtus is expelled without the knowledge of the woman, the decidua becomes thickened, hypertrophied, and oftentimes adherent; this, with the clots formed at the time, makes the carnified mole, so is not a true case of placentitis. This, with a sclerotic form of inflammation, which also occurs after the loss of the fœtus, is all the evidence of inflammation of the placenta that I can verify, and none of these are complications of gestation, but rather the results of the cessation.

Placental Apoplexy and Extravasations.—These are not serious; as they come from the umbilical vessels, and from the struc-

ture of the placenta, they cannot be very extensive, so are not a serious complication of gestation. If hemorrhage comes from the maternal side, it is again due to the uterine disease, and does not fall within my province.

We do find deposits of lime either on the surface or in the interior of the placenta; sometimes they appear as grains or needles, sometimes as calcareous masses.

These cases are more common in patients of extreme old age. I had one case in my own practice, in a patient who came from Dakota, and who had used nothing but limestone water during seven months of her pregnancy.

These lesions have no effect upon the mother, though they of necessity affect the vigor of the child, rarely, though, destroying its life; on the other hand the death of the fœtus is often the cause of these diseased or abnormal conditions of the placenta.

The most constant and most serious of all diseases affecting the placenta is syphilis. If the disease is transmitted by the zoösperm, both the placenta and fœtus may show its degenerating influence. This disease shows itself most commonly in the form of fatty degeneration.

If the mother is syphilitic before conception or becomes so after, the placenta may escape; in the latter case endometritis may be the result.

As it is almost impossible to make a diagnosis of these conditions prior to the delivering of the placenta, we can have but few indications for treatment, which are based on the condition of the placenta itself; but this is not necessary under the law of similia. The effects of violence can be met with Arnica, Rhus or Bry., as they are called for; effects of the sewing-machine by Sepia or Lilium, and the constitutional tendencies by Calc. c., Sul., Graph., etc. Unless the syphilis has been met by homœopathic treatment before conception takes place, its bad effects cannot be averted; which is a wise dispensation of Providence, for what curse can be greater than that a syphilitic child should live?

All these conditions are liable to repeat themselves in subsequent pregnancies, and here lies our greatest strength. Do not be longer satisfied until you have carefully examined the placenta, and if any abnormal condition is found, make a note of it, to be used for the explanation and treatment of dark symptoms recurring in the same patient. Given the life history of a patient, the subjective and

objective symptoms present, and the homœopathic remedy under the law of similia will always give a safe delivery to a healthy child.

Discussion.

T. G. Comstock, M.D.: You ask me in regard to my experience with placenta prævia. I have to say, that, notwithstanding I have had an extensive experience in midwifery practice, I have only had two cases of placenta prævia in private practice.

I have been called in consultation by other practitioners in such cases. Regarding the treatment of such cases, I have heard Ergot mentioned this morning, I think in Dr. Hale's paper. If I understood him correctly, he recommended and employed Ergot in appreciable doses, in a case of premature labor, or abortion where the fœtus was protruding, and thereby assisted in its expulsion. I understood him to advocate the use of Ergot in similar cases. Personally, I am opposed to giving Ergot in any instance whenever there is anything in the uterus. I will only quote Prof. Pajot, of Paris, for my authority.

He says: "*As long as the uterus contains anything, be it child, placenta, membranes, or clots, never administer Ergot.*" I want to be assured that the uterus is emptied of its contents, and then I will give Ergot if it is indicated. An exception to this rule may occur in placenta prævia,—however, in such a case, the necessity for it is rare,—but if it is required I should certainly give it. The last case of placenta prævia, that I was called to, was in consultation with a very excellent physician, and he was giving Ergot. I cautioned him about its effects, and in reality rather opposed it, and advised the tampon to keep the hemorrhage in check. The woman was delivered of a dead fœtus, after some hours.

She had a profuse hemorrhage, and severe tetanic spasms of the uterus, that did not entirely subside for some three days after delivery. I have seen many cases where Ergot had been given in confinements, and severe contractile after-pains resulted as the toxic effect of the Ergot. In the light of Dr. Hale's statement just now made, it seems that I misunderstood him. I was taught early in practice, by a celebrated authority, that at the termination of every labor, it was always good practice to administer a dose of Ergot—a teaspoonful of the fluid-extract. The argument for this was, that we would get a quicker and better expulsion of the placenta. I am at this date opposed to such a practice, being convinced that in some cases it will do harm, and therefore I believe in a more conservative method. I think the placenta may be delivered in most cases without much trouble, by conforming strictly to the rules of Credé's method.

In reply to Dr. Crank, I will say, when the hemorrhage in pla-

centa prævia is dangerous, and the cervix not yet dilated, I make a tampon of candle-wick (because it may be had at once without trouble) which I saturate with a solution of sublimate (1–1000), and pack the vagina full with it.

This is the simplest, and is quite an old-fashioned way. I merely mention candle-wick as a material for a tampon, because you can so easily pack it and remove it. If convenient, I should from preference employ the iodoform gauze, which is most excellent in such cases. I believe that ordinarily placenta prævia is treated too much. I should have mentioned that I always carry, in my gynæcological bag, Braun's colpeurynter, and in the event of a need for rapid and extensive tamponing it is a very practical and excellent device.

To effect a rapid expansion of the cervix, I have formerly used Barnes's dilators, but at the present time, we have a new instrument, that is much more handy, and more easily applied. This instrument is Allen's surgical pump, and I recommend it as an instrument that no surgeon can afford to do without.

L. C. Grosvenor, M.D.: The reason I called on Dr. Comstock to get his opinion in this matter was that last year I had two cases of placenta prævia, one in the last stages of gestation coming to me from another physician. There was little hope of her getting through. I put her on Murdock's Liquid Food and sustained her in that way until the gestation was ended, but when the labor asserted itself the hemorrhage was such that it seemed as if I must lose her. I took a soft sponge of good size and used that as a tampon against the raw and bleeding surface of the placenta and held it there until the os was sufficiently dilated to pass the forceps through and deliver. The child was lost through the excessive hemorrhage, but the woman recovered. In the other case, in which I was not called until near the last extremity, the lady had sent for a midwife. She came in and made the examination, and knew enough to get on her bonnet and get out of the house, having advised them to send for a doctor. The messenger went to my good friend, Dr. Hobart, by mistake. On reaching the bedside and looking the case over he went in the other room for his forceps. The lady was almost in articulo mortis. The husband, seeing this "young man" and not knowing him, said there was some mistake, he had sent for Dr. Grosvenor, and that he must not use his instruments. The messenger came therefore a second time and found me. The lady was almost in the last extremity. The os was well dilated and it was a complete case of placenta prævia. I took my Comstock forceps, which I always carry, and passed one blade around and the other through the placenta and delivered both placenta and child at once, the child being dead. The mother made a good recovery. Two or three years ago I was called in counsel in a case which the accoucheur declared to be one of placenta prævia. On examination I found one of those sacs of

water, where the membranes are rough, with the arteries and veins well outlined, so that it felt like the inner surface of the placenta. The accoucheur, being a young physician, had mistaken that roughness for the placenta prævia without thinking that that surface never presents in placenta prævia. Of course I didn't give the doctor away because the case had been stated to the family as one of placenta prævia, but I put the lady on the vessel and ruptured the membrane and in a few moments delivered—the only case of placenta prævia ever known without hemorrhage.

W. H. NICKELSON, M.D.: I had a case of placenta prævia, only I found in my case a different state of affairs from that detailed by the gentlemen who have preceded me. I was called five miles out to a lady who had been taken with flowing about 3 o'clock in the morning, but the message did not reach me until half-past 8. I saw her at 9 o'clock. The hemorrhage was of such proportions that it had soaked through a feather bed and straw tick, and there was quite an amount of blood on the carpet. I could just count the pulse and that was all. She could barely speak to me. I found the os the size of a half dollar; she was so anæmic that I had no trouble in dilating and proceeding. She was seven months along, and for the last three months had more or less of hemorrhage. I performed podalic version and partially delivered the child. It had been dead for fully ten days. I had the husband knead the uterus as I pressed the head up against the side and fundus of the uterus. That was the only tampon I used. She lost no blood after I began the delivery of the child, which saved her life, as I could not now count her pulse. I stimulated this woman with brandy. This was a case of placenta prævia—lateralis; although a small portion of the placenta extended entirely over the os.

GEO. R. SOUTHWICK, M.D.: I have been unfortunate enough to have witnessed a number of cases. Most of them were cases where the placenta dipped down into the internal os, the marginal placenta prævia not coming down far enough to form complete placenta prævia. My treatment in marginal cases is to simply puncture the membranes and friction the uterus, which will excite contraction of the organ as usual, and that is all that is necessary for some cases. If the hemorrhage is not arrested I perform version. The important things we have to combat in placenta prævia are, first, loss of blood, and, second, shock. Now when I have a case of marginal placenta prævia, I would first and always if possible turn the child by the Braxton Hicks method, and never use the tampon if I can get my fingers through the cervix. These tampons convey septic troubles in many instances. Turn the child and bring down a foot; that will form a tampon; then let the patient alone; the pains will come on, and the child will gradually be expelled. So long as there is no hemorrhage there is no immediate danger, except from shock,

which is largely determined by the amount of traumatism. We are all very liable to get rattled in such cases. There is a great deal of danger in doing too much. When we cannot get our fingers through the cervical canal, then I think our best plan is to tampon, and for myself I am rather in the habit of using simple absorbent cotton and wringing the tampons out of a 1–3000 solution of Mercurius corrosivus—the ordinary antiseptic tablets are very useful—and have them squeezed quite dry. When you do this they will not absorb the secretions nor shrink like the dry absorbent cotton tampons which, in a very short time, become of no use whatever. In the course of a few hours the cervix will expand a little, and the tampons can be removed, the cervix dilated, the child delivered, the patient saved, and, in a fair proportion of cases, the child as well. I believe this to be the best plan of treatment—to do away with the tampon as much as possible. I believe that cases treated in this way have shown the best statistics. In regard to the diagnosis of placenta prævia before the seventh month, if you have everything at hand and you can tell that the child is not viable, I think that it is safe to wait; but if the child is viable, I don't believe in waiting. It is too dangerous. Go ahead and induce premature labor and deliver the patient. I am very much in favor of turning rather than using the high forceps. In using forceps in such cases, there is not a little danger of injury to the child's head, as well as to the soft parts of the mother.

Susan Edson, M.D.: It was my misfortune to have had a case of true placenta prævia. I was called to such a case, and as she was fortunately near by, and I had her confidence entirely, proceeded as I liked. When I was called she was flowing freely. I didn't feel that I had any time to wait. I took a soft cloth which was at hand, wet it in hot water and used it as a tampon, holding it there for a little while, quieting her nervous condition by assuring her that we would have it all right soon, telling her the truth of what was the matter, as I always do, and as I always did before, having attended her previously when I had a right-hand presentation and had been successful in that delivery. She believed me; I gave her a dose or two of Gelsemium to quiet the nervous condition. When that was done, I gave her a few doses rapidly of Caulophyllum, punctured the placenta, delivered the child in less than half an hour without forceps, the contractions coming on severely and steadily. Of course our child was dead, for the placenta was perfectly solid, no circulation in it at all. I simply ran my fingers through it, and delivered the child, with no bad results except only the loss of her baby. She recovered rapidly, and I delivered her afterwards, once with a footling presentation. I had another case that was more a lateral placenta prævia; the hemorrhage was considerable but not as profuse as in the first case. I separated it from the one side where it passed over very slightly.

I don't now think that I gave her anything except a few doses of Caulophyllum. I had no difficulty at all in perforating the placenta. The hemorrhage didn't cease at once, but it held up during the pain. There was no serious hemorrhage after the operation was done. The child was lost, but the lady made a good and prompt recovery.

E. M. HALE, M.D., said, in answer to Dr. Comstock's question, that under certain circumstances, when the uterine contents had not been emptied entirely, he would give Ergot, but he would not do so as a rule. If pieces of the placenta were retained I don't think I should give Ergot to expel them. There might be occasions where the cervix was largely dilated that Ergot would expel, but the chances are that it would close the cervix and continue the retention. There are other remedies such as Caulophyllum, Leontin and Mistletoe, so much safer and superior, and which only contract the fibres of the fundus without closing the cervix, that I would rather use those than Ergot. Still Ergot has its place and its use. Ergot is peculiar and unique in its action.

DR. SOUTHWICK: I would like to state my reason for version instead of applying the forceps. In placenta prævia you can turn before you could put on the forceps, and while you are waiting for the cervix to dilate your patient is lying in needless danger. Secondly, very carefully compiled statistics, in a large number of cases, comparing the forceps operation and version, show a very large percentage of mortality over and above that of version for the high-forceps operation. I think the difference is about 15 per cent. in favor of version. In answer to the question of Dr. Grosvenor, namely, if the os was sufficiently dilated to admit of the hand going in there and bringing down a foot wouldn't it be sufficiently dilated to admit introducing the blades of the forceps, I would say I think not. Besides the head is likely to lie very nearly across the pelvis in its transverse diameter, so that if you seize the head you are very apt to place one blade across the occiput and the other over the brow and thus obtain a very imperfect hold. Then, in putting on the forceps, I fail to see how you can put them on without separating the connections of the placenta with the uterus. Every time you make that separation you open a sinus and cause hemorrhage. With the forceps there the contractions cannot be regular because the placenta is not fully detached. As an illustration of that we will bear in mind the Robert Barnes method of separation of the placenta from the lower cervical zone. It is all right if you separate it completely; but if you fail it is exceedingly dangerous. I don't see how you can get your forceps through so small a space without injury to the head or to the soft parts of the mother. I believe that version, when properly performed, is a very simple matter. If the membranes are not ruptured introduce the hand, bring down the foot as the head is pressed back with the external hand, and the cervix is thus plugged, and the hemorrhage

stopped. If you deliver slowly, you will find the case will go on almost naturally. I am opposed to the sponge tampon for the same reason that we have had so much trouble with sponge tents, because they are so liable to convey septic infection.

J. C. Wood, M.D.: The papers and discussions relative to puerperal hemorrhage and placenta prævia have been very interesting to me. Unfortunately I have not had the same extensive experience in the treatment of placenta prævia as have others who have spoken here to-day. Indeed, my experience is confined to three cases, and in all of these cases I was successful in saving the mother, and unsuccessful in saving the child. I have not had to contend, where I have used the Barnes dilators, with the difficulty in retaining them mentioned by others. I have two sets, consisting of three dilators each, and they do not slip out, and are not expelled until they have accomplished as much dilatation as is possible for the dilator to accomplish. It seems to me that the principle of simultaneously tamponing and dilating is the correct one during the first stage of labor. In all instances turning by the Braxton Hicks method, if possible, is the preferable one and the Barnes dilator very appropriately precedes this method where the os is but slightly open. In cases that become exsanguinated, there is one little point in the treatment that I wish to recall to your minds, and that is the use of hot milk. I have been exceedingly gratified with the results of its adminstration. It is well known that alcohol will predispose to hemorrhages in these cases. It is necessary to supply the waste and restore the intra-arterial pressure which has been lost; hence I give the hot milk in quantities as large as the stomach will stand. In this way I am in the habit of giving, during the 24 hours, two and three quarts and even a gallon of hot milk and in my experience the results have been most satisfactory.

Dr. Leavitt: There are a few subjects which will nearly always elicit considerable discussion in a meeting of this character, and one of them is placenta prævia. By the construction we have put upon this subject of the paper on "The Placental Complications of Pregnancy" we have drawn in under the head of "General Considerations" this question of placenta prævia, and have given a good deal of time to its consideration. I was very glad to hear Dr. Comstock say that he, in all his many years of practice, had had but two unquestionable cases of this character, because that comes nearer my own experience. I know there are physicians who get up in medical meetings—those, too, who have had, perhaps, but two or three years' practice—and tell that they have had, six, or eight, or ten cases of placenta prævia. If the subject of transverse presentation is brought up, why, during four months, they have had six cases. I am very glad to say my experience in this direction has been but moderate. I do not desire such cases to come my way. I realize that they are very dangerous, and when they come in an aggravated form are ex-

ceedingly hard to manage. If it is but a partial presentation of the placenta, that is to say, if the placenta is but partly over the os, and the hemorrhage is not excessive, we get along very nicely; but if the attachment happens to be a little more extensive, then, as Dr. Southwick has said, danger assumes alarming proportions. We can see at once that it is a perilous emergency. With respect to the management of these cases, I want to say that my own rule with regard to them, if they seem to be simple cases with but a small part of the placenta thrown down over the os, is, if I can get my finger by, to rupture the membranes and allow the liquor amnii to escape. That, in many instances, if not in the majority of cases, will control the excessive hemorrhage. But in another instance, where, perhaps, there is more of the placenta on the lower segment of the uterus, I will have to manage differently. I may not think best at first to puncture the membranes. I believe that we should be very careful how we go to work indiscriminately, and puncture the membranes for the purpose of allowing the liquor amnii to escape. We want to be pretty sure first in our minds that that treatment is going to arrest the hemorrhage; for, if it does not, we have made further management of the case exceedingly difficult; and why? Because it is one thing to practice podalic version with the membranes intact, and another thing to practice it with the amniotic sack empty. Under such circumstances, if the os is sufficiently dilated to admit of the introduction of two fingers, as Dr. Southwick has told you, we can go ahead and practice version by Braxton Hicks's method. I do not believe, however, that it is the simplest thing in the world, as he would have us believe. I don't think it can be done by every tyro in obstetric practice. I don't think it can be done more quickly than the forceps can be applied, provided we can get the forceps on at all; but it is the thing to do if we can do it. By this conjoined manipulation—two fingers against the presenting part pushing in the right direction, with the external hand bringing the opposite pole of the long fœtal diameter down to the os uteri—we may succeed. If, by this manœuvre, we can accomplish what we seek within a reasonable length of time, that is the correct expedient. But if the os is not dilated, if it is not sufficiently wide to admit of the introduction of the two fingers, and the hemorrhage is profuse, then what shall we do? I believe the only thing we can do is to introduce the tampon. Now I have given directions with regard to the thorough tamponing of the vagina a good many times; but I want to say right here that I never undertook to introduce a complete tampon of the vagina in all my practice. I have never yet seen a necessity for it. That, perhaps, is my fortunate experience; but I have no doubt that cases do present. When the os is not sufficiently wide to admit of the introduction of the fingers, and the symptoms are urgent, then you must tampon; but tampon well. I have been called to cases in con-

sultation where a tampon had been introduced; but oh, such a tampon! There was just about the same amount of hemorrhage with it as there would have been without it, and the plug which had been introduced was drawn away with no effort whatever. It just lay in the vagina as a foreign body. If we do anything with a design to control that hemorrhage we must do it thoroughly. We may be obliged to leave the tampon for a short time; then, when the os is dilated, go ahead with the operative procedure. If we cannot perform version by the Braxton Hicks method we will have to perform it by the internal method—that is, by introducing the whole hand and forearm, getting hold of the foot, or the two feet, bringing them down. I do not believe—and in this I agree with some of the preceding speakers—I do not believe that the forceps are often applicable to these cases of placenta prævia. I do not believe that it is an easy thing to make an aperture through the placenta sufficiently large to admit of the easy passage of the blades of the forceps without pushing that placenta entirely off from its uterine attachments. I do not believe that we can pass the blades of the forceps without first making such an aperture in the placenta, as suggested by Dr. Grosvenor yesterday, without the exhibition of a degree of force that would be dangerous to the woman. But in those cases where there is only a flap of the placenta over the os, where we can get by the side of the placenta, and the head is not forced back by the thickness of the placenta prævia, we can get the forceps on. Then we can give plenty of time for full dilatation of the os uteri, inasmuch as pressure of the head against the placenta will, in most instances, prevent serious loss of blood. There was a rule given by Prof. Meigs, of Philadelphia, a good many years ago: "Whenever you think of a case of placenta prævia, think of podalic version;" and I believe that is a rule of practice for us to bear in mind. The practice of version in his day was by entire introduction of the hand. That method has been improved by Hicks, and where the improvement can easily be followed we should practice it, passing only the two fingers instead of our whole hand, because in this way danger to both mother and fœtus is reduced to a minimum.

Dr. Grosvenor: In regard to the difficulty of passing the forceps through the placenta let me say, if you can so easily push your finger—a blunt point— through the placenta, most certainly you can pass the sharp blade of your forceps through. I believe that the forceps, next to chloroform, is the greatest blessing that has come to the lying-in woman in the last century.

R. C. Allen, M.D.: I have been in practice about twenty years, and I have had but one case of placenta prævia, and that quite recently. I can see how it is possible for the patulous os to admit of the introduction of the two fingers, or even the whole hand, or, perhaps, the introduction of the forceps. But in my case the os was

rigid. I couldn't introduce one finger—and I think I can go where any other man can—but I couldn't get into that os. She was flooding, and had been furiously so. I placed her upon the left side, and then gave Ipecac and rested for a while, and the hemorrhage ceased without the use of the tampon, and in the course of an hour or two contractions came on, and the os got a little larger, so that by persistent efforts I was able to get my fingers in, and then made a quick delivery. I controlled the hemorrhage by Ipecac in tincture, of which I used 5 drops in about half a glass of water, giving a spoonful every five minutes, and the hemorrhage was controlled, and that was the point I wished to make. It is a very easy matter to talk about going in if the os is patulous. I defy you to go in and turn in some cases where the os is rigid. It is impossible.

TYPHOIDAL COMPLICATIONS OF GESTATION

By Edward P. Scales, M.D., Newton, Mass.

Pregnant women are (consequently) endowed with increased vitality and ability to endure privation and disease. How common the expression, "She will live until she has given birth to her child!" It is not always true, but there are only exceptions enough to prove the rule. Among complaints affecting women in this condition is (though not often) typhoid fever, resulting from the same cause or causes that would have produced it if they had not been in that condition. The disease can *generally* be aborted when taken early and properly treated. Some of the remedies with which success may be expected, if used according to their indications, are Baptisia, Gelsemium, Arsenicum, Bryonia, Veratrum viride and Sulphur; later, if the disease progresses in spite of any of these, Rhus toxicodendron, Phosphorus, Lachesis, Hyoscyamus, and a host of others, from which the similimum may be selected as needed.

I should manage a case of typhoid fever occurring during gestation with scarcely any difference from a similar condition of disease when pregnancy was not present. In such cases I rarely use any stimulant, and never until after the fever is arrested, but prescribe some mild form of nourishment to sustain the patient. Frequent sponging with warm soft water is advisable so far as the patient is hot and dry, not sponging the whole body if the temperature or comfort does not indicate it. Fresh air should be furnished at all times, without the possibility of taking cold in consequence. Keep the patient from worriment and anxiety in regard to anything, and as quiet as possible with suitable nursing.

Typhoidal, as well as other diseases occurring during gestation, should be treated generally as if gestation did not exist, it being understood the treatment should always be strictly homœopathic, and therefore mild and safe.

AMERICAN WOMEN CHILDING.

By George B. Peck, M.D., Providence, R. I.

Who are American women? Strictly speaking, Indian squaws. They are so few, however, as to be entirely inconsequential and when the twentieth century dawns will live in history only. But to whom shall the term be applied? When I am informed by some distinguished authority (?) that I who came over (potentially) from England to Plymouth in 1630 with my father, grandfather and two uncles, have not yet become acclimated and am still a foreigner and an alien, I begin to question whether such beings really exist. Then I look around, compare the various specimens of femineity within my range of vision and finally conclude that women of European extraction and of American (U.S.) generation of the second remove, at least, are alone entitled to that designation. Octoroons are legally, if I mistake not, included in this classification, but the utmost limits of laxity in this direction is to be found with quadroons.

The impossibility of obtaining the statistics of any considerable number of women entirely conformed to the conditions just indicated was recognized at the outset. It was hoped that since the "poor white trash" (and black trash too for that matter, although darkies are more sensible than the Irish and don't imagine it is necessary to be physicked to death in order to be cured) which represents foreign nativity and the first remove therefrom are firm devotees of allopathic treatment, and as the records of our charitable institutions were unexamined, elements of error, though necessarily admixed, would be reduced to a minimum and a practically correct portraiture of American women, obstetrically considered, would be obtained. The result has equalled the brightest anticipation; complete failure had been feared. The statements herein contained are based on the experience of 121 physicians. Circulars were addressed only to members of the American Institute of Homœopathy and to homœopathic

practitioners of good repute in Rhode Island. Replies were received from 141 doctors, of which twenty were thrown out for divers reasons, frequently for some defect apparently slight yet sufficiently important to render useless the entire answer. In no case was the face of a return accounted sufficient proof of its accuracy, but each statement was tested by all available knowledge not only of the subject matter but also of the physician and his life work. Hence the result may be depended upon as not varying to the extent of a single per centum from strict exactitude.

Obstetric registers, as is well known, are of comparatively recent introduction. Therefore few of our elder physicians possess complete birth-lists. At the same time they may have kept partial memoranda which with their account books and memory furnish statistics almost as reliable as detailed statements. For this reason, not less than for the internal evidence of reliability each accepted report presents, I place on my estimated figures a value scarcely inferior to that possessed by the other class. The difference between these two sets of numerals does not excede proportionately that exhibited by any two replies consecutively received. For many considerations I incline to the use of the total result, but that each member may have the opportunity of using such figures as best commend themselves to his judgment, its component parts will be given.

Of the hundred and twenty-one returns tabulated, forty-nine were from physicians who *estimated* the number of confinements they had attended to be 31,042, at 30,778 of which single children were born, at 261 twins, and at 3 triplets. It is desirable to secure the statistics of single births, but a number of physicians misunderstood the question and counted in their plural births in figuring up their statistics, while others most properly but most unfortunately, as things turned, omitted them. Hence the presentation footings give not only all the facts of all the single births but also of some of the multiple. We find, then, that the total number of births reported by this class of practitioners is 31,309, in 378 of which the face presented, in 29,889 the vertex, in 545 the breech, in 103 the shoulder, and in 82 the trunk. They resorted to internal cephalic version 85 times, saving 84 mothers and 71 children; to internal podalic version 146 times, saving 144 mothers and 116 children. They met twenty-one cases of extra-uterine pregnancy wherein they lost four mothers, but when called in consultation on such occasions, eight in number, they saved

only one. Craniotomy was performed on thirty-three of their patients with a loss of two mothers; when they operated for others they saved eighteen of the nineteen mothers. In these operations the cephalotribe was used seven times and the cranioclast sixteen. Twice evisceration was performed and once decapitation without injury to the parent; twice also Cæsarean section with the loss of only one child. Once this operation was undertaken after death in order to save the child, but without success.

The seventy-two physicians who report their statistics *by count* are mostly comparatively young practitioners. Hence we find they have attended but 20,671 confinements, at which there were 20,446 single births, 221 pairs of twins and four sets of triplets. In these 20,900 births there were 358 face presentations, 19,656 vertex, 543 breech, 186 shoulder and 85 transverse. Twenty-four children were delivered by internal cephalic version with a loss of one mother and eleven children, while 250 received internal podalic version with a loss of three mothers and sixty-two children. Ten cases of extra-uterine pregnancy are reported, with three deaths, and two were seen in consultation, but too late to avail aught. Craniotomy was performed twenty-six times with a loss of four mothers and fourteen times in consultation with a loss of one mother. In these cases the cephalotribe was used seven times and the cranioclast six. Evisceration was resorted to twice without maternal injury, while the Cæsarean section was performed twice in his own practice and twice in consultation by a gentleman who saved all the mothers but could not preserve the children.

Combining now the two classes, that we may gather into a single grouping the experience of the old and of the young, a grouping that shall best represent our experience as an Institute and as a school, we find 121 physicians report 51,713 confinements, at which there were 51,224 single births, 482 pairs of twins and seven sets of triplets, making a total of 52,209 births. Among these were found 736 face presentations, 49,545 vertex, 1088 breech, 289 shoulder and 167 transverse. Internal cephalic version was performed 109 times, resulting in the preservation of 107 mothers and 84 children, while internal podalic version was effected 396 times to the well-being of 391 mothers and 304 children. Extra-uterine pregnancy was encountered thirty-one times, from the perils of which twenty-four women were safely delivered. Ten cases were seen in consulta-

tion, but so late that only one woman escaped death. Upon fifty-nine patients craniotomy was performed, fifty-three surviving; also thirty-three times in consultation, with thirty-one survivors. The cephalotribe was used fourteen times and the cranioclast twenty-two. Four infants were eviscerated without injury to their mothers. Decapitation was resorted to once with equal safety. Four cases of Cæsarean section upon the living are reported, ensuring the lives of the four mothers and one infant; on two other occasions it was performed in consultation without losing a mother but without saving a child. It was once undertaken after death, but with no beneficial result.

I forbear discussion of these figures, preferring each member of the Institute should draw his own conclusions regarding them. My duty is done when facts are presented with the greatest possible accuracy. One caution, however, is to be observed in their use. Consultation cases referred to are not counted in the number of confinements nor in the list of presentations. They were added for the purpose of securing a little side-light, if possible, on questions pertaining to one's own practice.

REPORT

OF THE

BUREAU OF GYNÆCOLOGY.

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CHANGES IN THE FORM AND POSITION OF THE UTERUS.—EXTRA-MEDICINAL TREATMENT.

By O. S. Runnels, M.D., Indianapolis, Ind.

The object of this paper is to outline those measures in the treatment of uterine malformation and displacement which lie outside of the scope of medicinal therapeutics; to deal with those elements of the problem which in the very nature of things cannot be amenable to medicines alone and, thus, by exclusion, to render more distinct the legitimate range of drug-administration.

I. Measures Preventive.

The mature virgin uterus has a normal weight of but little more than one ounce. It has a long diameter of about two and a half

inches, and a transverse of about an inch. It has a body and neck well-proportioned, an os and canal sufficiently patulous, and stands slightly ante-flexed, about three and a half inches from the vulval opening, at an angle of about 45° with the spinal column.

Such a uterus during its functional life will menstruate easily, conceive readily, and acquit itself creditably in all the maternal emergencies; and any deviation from these conditions is fraught with embarrassment. This is the physiological standard, departures from which make the substratum out of which grow all the ills that the female is exclusively heir to.

The earliest deviation from this perfect structure is due to *the errors of development* to which the rapidly-growing girl is peculiarly liable.

The sexual organs at puberty are found to be immature. The mammæ are either wholly wanting or have been so cramped in their unfolding as to be forever useless as fountains of life.

Ovaries, tubes and uterus are still child-like, diminutive. The whole of the uterus may be too small, or the dwarfed condition may be limited to the cervix, which is out of proportion to the body. The os is unduly restricted, perhaps to the size of a pinhole, and the canal is narrowed, stenosed. Such a uterus is not fully grown, and is incapable of doing the work of a finished organization. It is the so-called "infantile uterus," and is inadequate for the performance to be required of it.

To the possessor of such organs, menstruation must be a difficulty, conception a perplexity, and parturition a catastrophe.

In all such cases nutriment has been withheld; the building material—through the blood-current—has failed to reach its destination; nerve-centres have witnessed the disregard of their commands—if, indeed, they themselves have not become too feeble to utter them—and the organs of special development have consequently been *starved*.

Consider next the *errors after development*, to which the woman is prone.

In spite of the influences above cited, the sexual organs may become matured and prepared to act well their parts in the programme of life. But wide-spread treason is hatched against them; impediments are imposed upon them, and they are denied their legitimate exercise. From the dawn of their awakened life to its tired close,

they are wantonly sinned against. Their ability to furnish sensations of delight is drawn upon regardlessly, and, in the present civilization, the growing tendency is to use them only for that purpose!

Thus, from rights denied, from abusive use and destructive interference with normal function, congestion is maintained, weakness engendered and disease established. In every case of perverted function a cause has preceded—there has been an antecedent to every consequent. Which leads to the conclusion that the prophylaxis of female disorders is the greatest work assigned the gynæcologist.

Therefore, inquire further just how have the generative organs of woman been dwarfed or rendered incompetent? What influences have been operative to thwart the execution of their functions? Why is there such wide-spread—almost universal—sexual disqualification among modern women? For such degeneracy is not a natural endowment. It is, in fact, but a comparatively recent acquisition. The saying, that "The healthy woman must be searched for," has not for many decades been current. In one short generation a special department in medicine has been demanded for her treatment! Not a doubt exists but that womankind is to-day making the worst exhibition of physical inability and frailty that the world has ever witnessed. Fewer capable mothers are to be found than formerly; and disability, general and special, is rapidly becoming the password of the sex.

All of which argues that there is a growing disregard of fundamental principles. Much is due, no doubt, to hereditary endowment, but by far the greater part in each case is post-natal acquirement. A worthy physical inheritance is a thing to be earnestly coveted, and all parents should see to it that the hereditary incubus is eradicated before they beget children. But, following this, the life in the home, the school and society, should receive a more rigid scrutiny than it has hitherto had. Better attention must be given to rules of correct living in all that pertains to the sustenance, development and preservation of, particularly, the female body. Intelligence, like light, must be shed abroad, touching all her organic functions, in order that, at all times, the right may be followed. The indulgences of life must conform to physiological demand. The menstruating girl must be treated as such, and not be put into the treadmill of school and other life as if she were not a periodical being. Precocious brains must not be further developed at the ex-

pense of special organs that are lagging for want of nutriment thus diverted from them. During her special seasons all endeavor to emulate her unfettered male companions in intellectual pursuits should be emphatically countermanded. She should be faithfully guarded against every influence that can embarrass her sexual abilities. Thorough knowledge touching the physical life of woman must be inculcated, and woman must not refuse to be guided by that teaching, *Woman must be woman.* Every effort to disregard the import of her special organization is filled with peril. The modern notion, that she must equal or excel man in the masculine employments or be counted an inferior, must be antagonized at the onset and forever. It is a false issue, and every fact of her being condemns it. The Creator's design cannot be reversed. The *fiat* has gone forth, and by no possibility can the status be changed.

Woman's primary mission in this world is *motherhood,* and the sooner that sphere is loyally accepted the better for all. Refusal to perform this errand is treachery to God's command. It is loaded with the heaviest penalties, for it leads straight to the extinction of the race. The reproduction of our kind must no longer be considered as a thing low and unpopular—to be evaded at all hazards. The spirit of infanticide must die. Motherhood, the crowning glory of woman, must be made to rank as the chief accomplishment of female life. Every member of the sex must be provided with the disposition and the physical ability to perform it, whether she is ever permitted, by her circumstances, to realize it or not. From the dawn of her existence to its fulfilment, her culture should be arranged with the object of making the best mother of her possible. Every kind of training that tends to cripple this ability, and thus virtually to unsex her, must be relegated to the shades from whence it originated. Harvard Annexes, Conservatories of Music and so-called "Schools of Advanced Culture" must take position in the rear ranks till the women of America can reverse their physical record, can demonstrate their competency to bear children easily and safely, to rear them from their own breasts and to take their places again in society, erect and well. The nursing-bottle and the thousand-and-one baby-foods must go.

There must be put into the minds and bodies of women more knowledge and force of the practical kind. They must be trained primarily for that supreme service of their lives—which nobody can

render for them, but which, perforce, they must execute for themselves;—rather than into that "finished education" which can be of no service to them in their life-trials, and which may prove in very truth the "finish" of, alas, how many of them!

I do not advocate less culture, but better, far better.

In the great services of the home and in those emergencies requiring the possession of the finest physical ability, it matters little whether the mother has been trained to speak with tongues, to execute a sonata, to paint like a Raphael, or to make a stump-speech. These things count for little—can be rated at something like their relative value—when doctors are counselling how they may yet save a life which these have jeopardized, and which, by the possession and honest exercise of a little practical knowledge would never have been menaced.

II. Measures Reparative.

If the foregoing course could be pursued, and all flesh brought under the sway of natural law, the work of the *mender*—in a few generations—would be gone; processes of repair would be uncalled-for. But such a desideratum is far from fulfilment. It is apparent that for ages yet to come, the promotion of sexual cripples will be continued, and the services of the gynæcologist will be demanded. First needing help are the deformities incident to embarrassed nutrition in fœtal and early life. The orthopædist knows full well how prevalent are cases of infantile paralysis, deformed limbs and checked growths, and the gynæcologist can bear witness that nowhere are such expressions more abundant than in the female pelvis.

Not only is the bony wall often found to be an abortion as to its intent, the pelvic diameters being such as to forbid fœtal passage; but the soft parts also have such deviation from normal anatomy as to render them partially or wholly useless. Occluded vagina, double vagina, atresia vaginæ, the double uterus and the infantile uterus are instances of this delayed or perverted development. While some of these conditions are so pronounced as to demand early attention, others are so hidden as to escape timely notice. It is to one of the members of the latter class that I wish to call your especial attention. The infantile or illy-developed uterus, I am convinced, is the chief source of female difficulty, and will account for the major part of the mal-performances with which we have to contend. Studying the problem from this standpoint, we can the more readily explain

the ætiology of flexions, painful and lacking menses, sterility and many of the difficulties of gestation and parturition, and particularly the lacerations incident to the latter.

If, as before pointed out, the atrophy of the uterus be general, involving the whole organ, little can be expected of it in a functional way. Capable of making but feeble—perhaps painful—attempts in that direction, it will never be apt to essay the maturer work of procreation. If, however, the body of the uterus be well-developed while the cervix remains infantile, or *vice versa*, the conditions are favorable for the development of almost any discord known to gynæcology. It is not sufficiently recognized that the uterine body and cervix are really distinct organs. They have a different blood-supply, a different nerve-supply, a difference in direction and quality of muscular fibre, and a difference in the membranes which line them—the cervical, being not unlike mucous membrane elsewhere found, while the corporeal, the endometrium, belongs to the so-called adenoid tissues.

Johnstone says: "The relation of the cervix to the body of the uterus is almost that of pylorus to stomach. It not only supports and protects the cavity from intrusion, but retains its contents, and at the proper time assists in the expulsion."

The right relation, therefore, of these parts in full maturity is emphatically demanded, and there can be no freedom of function without it. Full nutrition must be secured, or the atrophied cervix will flex, and the stenosed and tortuous canal will serve as a dam, both to ingress and egress. The arrested growth of body will be accompanied by immaturity of endometrium which, not progressing to the softened myloid state of the ripened uterus, remains hard and tough, rendering it difficult for the menstrual stream to work its way through its interstices, and impossible for the product of conception to make placental attachment upon its non-receptive surface, or to take root there, if, perchance, lodgment is made.

Early detection of such arrested growth is imperative in order that steps may be taken during the growing age to supplement the deficiency. Every girl at puberty, with non-developed mammæ and delayed, deranged or painful menstruation is an object of curiosity, and the subject of special attention. She should at once be put into the inquisition. Study of her habits and mode of life should be made. Books read, branches studied and music followed should

pass under review and be regulated. Full information concerning her functions and the care requisite at special times should be furnished. And all this should be supplemented by the indicated medicine faithfully and for a *sufficient time* administered. These failing, physical examination should not be postponed; exact conditions should be known, and measures instituted of a more direct character.

Marriage, under these circumstances, will be a calamity. She is ill-fitted for the assumption of any such duties; and this change in her manner of life should not be waited for, or permitted until she is able to perform its functions. Procrastination, in such a dilemma, is a wicked thief of very valuable time. All mock-modesty, in such an instance, must yield to the interests of the life that now is. Congestions must be combated, flexions straightened and stenoses opened up. All embarrassments must be removed and the forces of life in that region energized, quickened. In this service the uterine dilator, the intra-uterine stem and electricity must not be forgotten. And much can be accomplished by attention to proper gymnastic and open-air exercises, including horseback-riding and appropriate food.

Owing, however, to a variety of thwarting influences, chief among which is a lack of timely attention, many cases will prove to us disappointing; we shall be unable to restore the deficiencies.

In some of these cases of the hopelessly incurable, a small percentage of them, where menstruation has become such a burden from uterine fibroids and other causes as to well-nigh swamp the life-forces, and the periodical life is wholly without mission, anticipation of the change of life, by the removal of the ovaries, is demanded. Especially is this the case where tubal and ovarian disease is ineradicably established and hystero-epilepsy or some other of the life-burdening neuroses is unalterably fixed. In all such cases the menopause is the indicated remedy.

The changes in the *form* and *position* of the uterus encountered in those who have reached development and for varying periods have made good physical records—I mean the lapses from the normal state so frequently met with as areolar hyperplasia, subinvolution and the versions, flexions and prolapses of adult life—must be studied and treated in like manner. Invariably there must be removal of the "causa occasionalis," and the restoration of tone through a perfect blood-supply, and the indicated remedy is that agent which will

the most quickly and satisfactorily accomplish this result, whether it be a well-proven drug, electricity, a mechanical appliance, or the surgeon's knife.

Discussion.

John C. Morgan, M.D.: I have in the past deviated from homœopathic treatment, pure and simple, when I thought it was necessary, owing to the exigencies of the cases, but I have quite often, disgusted, gone back again, not finding anything that satisfied me so well in all cases as the pure homœopathic treatment. In one recent case, particularly, I applied an ordinary expanding rubber stem and was continually disappointed, in that the stem would soon be expelled by the uterine contractions. So long as it remained *in situ*, it was well enough, but as soon as the expulsive effort began, as it invariably soon did, then the instrument was always partially extruded; which, of course, necessitated its removal. I would like to know whether this stem, having a cup-shaped base, is a positive preventive of that peculiar inconvenience?

L. L. Danforth, M.D.: In the first place it is essential that the stem should pass well through the internal os. The cup-shaped shoulder, in which the stem terminates, prevents further entrance, and by fitting the cervix nicely, the suction produced aids in its retention. When the stem is thus fitted there is little danger of its slipping out; but in order to insure its perfect retention, a small tampon of absorbent or borated cotton may be placed against and around the shoulder.

Dr. Morgan: Does not that necessitate the continual interference of the physician? You want to dismiss your patients. They do not want to be coming to your office so frequently unless they happen to be very wealthy, and in such cases they will be forever and ever on the physician's hands. That is what we should avoid, for our own convenience and for the moral effect.

Dr. Danforth: The stem should never be introduced at the physician's office. The operation should be performed at the patient's house, and an anæsthetic is essential in the first introduction of the stem, as it produces relaxation, and facilitates the task of the operator. Before introducing the stem, the dilator should be employed. The stem, placed in the cervix after it has been dilated, prevents recontraction by exerting a constant pressure upon the constricting fibres. During the first twenty-four or forty-eight hours, the stem will be grasped firmly by the cervix; but later, relaxation occurs, and a larger size can be introduced. The different sized stems are employed in succession as the dilatation will permit. The treatment should be continued during the period of a week, the patient meanwhile *being confined* to bed.

I should say, perhaps, that too much must not be expected of the operation alone. Subsequent treatment is frequently necessary to relieve existing conditions dependent upon the cervical obstruction. Mild cases, treated early, may need little or no attention after the removal of the cause; but in cases of long standing, with inflammatory complications resulting, appropriate treatment is necessary to effect a complete cure, and the operation must be looked upon as an initial step in this treatment. In answer to Dr. West I will say that I have not used the *solid* stem as it plugs up the uterine canal, nor have I used the galvanized stem.

THE THERAPEUTICS OF UTERINE DISPLACEMENTS.

By George R. Southwick, M.D., Boston, Mass.

The writer infers from the remarks by the chairman of this bureau in the circular addressed to its members, that the object of this paper is to bring to notice those homœopathic remedies and their indications, which are best suited to the treatment of displacement of the uterus. Its scope, therefore, will be limited to The Homœopathic Therapeutics of Uterine Displacements. Local, mechanical and surgical treatment will be omitted, as well as the treatment of inflammatory and other complications.

There is an impression, too prevalent among physicians, that there is no use in prescribing for a displacement of the uterus. We have ample evidence of the value of remedies for other disorders of the sexual organs, and why should there not be medicines capable of giving similar relief to the disorders under consideration? If the chief factor in the ætiology of uterine displacements is undue flexibility of the uterus, due to impaired nutrition, as maintained by Graily Hewitt, or pelvic inflammation as advocated by T. A. Emmet, then, surely, remedies are of prime importance if we can judge by the effect of medicines in similar pathological conditions in other parts of the body. Expressing an opinion *pro* or *con* does not decide the question of curative effects: neither the failure to cure with our present remedies, only so far as these particular remedies are concerned. It is only by diligent search, study and trial that specific or efficient remedies will be found and confer more fame on the discoverer than can ever be enjoyed by the inventor of a pessary or a plastic operation.

Our provings on the female sexual organs are not only meagre and imperfect, but were made when gynæcology was unknown or in its infancy, and there are doubtless many valuable drugs yet unproved or even unknown. In this very field, it was hoped that the love of sci-

ence, the desire to relieve suffering, and the advancement of the medical status of lady practitioners would encourage our colleagues of the other sex to institute provings and verification of drug symptoms. Peculiarly well fitted for the task and with opportunities for observation and making fine distinctions, with which no man can ever compete, how many of the lady members of the Institute have ever undertaken it? There is a great need of concerted action on the part of all physicians, and an exchange of experience, especially such as may be hoped for from such an audience as this, which will materially increase our knowledge and lead to the discovery of valuable remedies. Let us report our successes before we recount our failures, and question in the latter case whether the man or the remedy was at fault.

By way of introduction to such a discussion, rather than giving a complete resumé of the subject, the writer begs leave to present the following remedies:

Aletris farinosa.—This remedy seems to act as a tonic to the generative organs similar to China and Helonias. It is my opinion that it acts best in appreciable doses of the tincture or fluid extract. It is quite bitter, and patients are apt to question the homœopathicity of it, and with some right, as the remedy is more commonly used by the Eclectics than by us. It is best suited to debilitated, dyspeptic women suffering from profuse leucorrhœa; profuse, painful and premature menstruation.

Arsenicum has given much relief to a young unmarried woman who has marked retroversion and descent of the uterus. She complained of burning on top of the head; burning in the stomach, worse at night, with a sensation of rawness underneath the sternum; pain deep in the left side of the pelvis, extending from the left abdominal ring to the crest of the left ilium. She also complained of pain above the crest of the left ilium, which was not relieved to any extent by Arsenicum.

Arctium lappa merits a careful trial. The writer has recently used it empirically in the first and second dilutions for many cases of retroversions, flexion and descent of the uterus, with better results than any other one remedy. While there have been some failures, he has met with considerable success in relieving symptoms, and but little in changing the position of the uterus, though such cases have been observed. The best results have been obtained in young unmarried women suffering from retroversion and complaining of ano-

rexia, prostration of the muscular system, pain in the sacrum and thighs, especially in the right side, and soreness in the pelvis. Abnormal discharges from the vagina do not appear to be necessary in prescribing this remedy.

Dr. H. H. Read* gave it in the second decimal dilution for a case of procidentia on which he intended to operate a few weeks later, but the position of the uterus improved so much there was no need of it.

Aurum.—Farrington states that Aurum will cure prolapsus uteri only when the uterus is prolapsed in consequence of its great weight from chronic congestion. The displacement is not the result of relaxed ligaments or a weakness of the general system. It is especially adapted to scrofulous persons subject to melancholia or hysteria, or bone pains in the extremities, and who are over-sensitive to bone pains and cold air.

The aurum natronatum muriaticum is preferable if the prolapsed uterus is indurated.

Belladonna is an excellent remedy for descent of the uterus from acute congestion, with severe backache, pain in the right side, hard pressing down in the genitals, frequent or involuntary micturition at night, profuse menstruation, blood uncoagulated, more often dark than red, and sometimes offensive. The organs are sensitive to examination. I have had no success with it in displacements of long standing.

Calcarea carb. is occasionally called for in patients with decided constitutional symptoms and too early, too profuse and too long menstruation; acrid, milky leucorrhœa, with itching and burning; easy perspiration, especially in the morning, and much sweat on the external genitals; sense of great exhaustion and weariness.

The Fluoride of calcium is an excellent preparation and deserves a trial when symptoms of perverted nutrition and dyspepsia become marked.

Conium.—The writer has nothing to offer from his own experience, as he has no records of using it for displacements. It would seem as if it ought to be an excellent remedy similar to Kali muriaticum, Aurum natronatum muriaticum and Platina for downward displacements of the uterus due to chronic metritis and hyperplasia of con-

* Southwick's Manual of Gynæcology, p. 232, 1888.

nective tissue, lancinating pains in the pelvis, soreness and swelling of the breasts before the menses.

Ferrum iodide, in the first decimal trituration, was a favorite remedy of Dr. H. C. Preston * for both retroversion and prolapsus, atony and congestion of the uterus, involuntary urination, fiery red face, delayed and profuse menstruation, as well as other well-known symptoms. The writer has not yet tried this remedy but proposes to do so the first time it is indicated.

Helonias in rather strong doses has proved beneficial in my hands for anæmic low-spirited patients, subject to profuse and offensive leucorrhœa and profuse menstruation. There may be soreness and weight in the pelvis and an irritable condition of the vagina of an aphthous character.

Murex purp. received favorable mention from Carroll Dunham.† It is similar to Sepia. There is a sense of uterine consciousness, aching, drawing, burning pains in and about the pelvis, worse on lying down; feeling of general prostration; sinking at the stomach; increase of the sexual instinct and delay of the menses.

The writer has had no experience with this remedy, but as it comes recommended by such high authority it deserves a trial.

Nux vomica has been occasionally useful for descent and congestion of the uterus, associated with constipation or caused by a sudden wrenching of the body; pressure in the pelvis; menses too early and too profuse; flow dark; morning nausea; acidity of the stomach and morning aggravation of the symptoms.

Rhus tox. has benefited one of my patients suffering from prolapsus of the second degree. She had a consciousness of the uterus feeling sore and low down in the pelvis, so as to seriously interfere with walking; micturition frequent and painful. Much burning and itching of the skin all over the body. Soreness in the back and hypogastrium and subject to rheumatism. This drug ought to be useful for displacements resulting from traumatism.

Secale cornutum is especially applicable to displacements following confinement‡; relaxed condition of the vagina; descent of a heavy,

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* Leadam's Diseases of Women, p. 285, 1874.

† Lectures on Mat. Med., vol. ii., p. 158, 1878, and the Am. Hom. Review, pp. 306 and 399, 1864.

‡ See Allgemeine Hom. Zeitung, vol. xxiv. No. 2, p. 153. Cases reported by Dr. Kaltenbach.

enlarged uterus; prolonged bearing down and atonic uterine hemorrhage. Those who are accustomed to use Ergot immediately after labor, may have noticed how often it will retard the process of involution. This is sometimes forgotten when Ergot is used freely, and not infrequently, needlessly. The remedy should be freshly prepared, and if it fails Ustilago should be remembered. A deep-seated dull soreness in the pelvis is a symptom I have found useful in prescribing Ustilago. Dorland, in common with most writers, believes that Ustilago produces clonic contractions of the uterus similar to Quinine, while Ergot causes a tonic contraction.

Sepia has been given high rank as a remedy for posterior and downward displacements of the uterus. I am bound to state that so far as my experience goes I have been much disappointed with it and believe the remedy has been much overrated. In a recent case of retroversion of the gravid uterus at the third month, and profuse, painless, bright red flowing, accompanied by a sense of great prostration, relaxation of the abdominal muscles and some weight in the pelvis, Sepia gave much relief to the patient, who voluntarily remarked that it seemed to strengthen the muscles and ligaments in the uterus very promptly. It had no effect on the flowing, and the relief to the patient was, in this instance, quite independent of replacing the uterus.

Dr. Dunham styles this the remedy *par excellence* for prolapsus, and states that the simultaneous irritability of the bladder and the presence of leucorrhœa, together with the hot flushes and the sympathetic affections of remote organs, serve especially to indicate it. The venous congestion of the pelvic organs, the sense of bearing down in the pelvis to an extreme degree, as well as the relaxation of the broad ligaments and the sinking, gone feeling in the stomach, are well-known additional indications for Sepia.

Stannum * is useful in some cases characterized by leucorrhœa of light-colored or transparent mucus with great debility, prolapse of the vagina or uterus with bearing-down sensation and great debility. The menses are too early, profuse, and preceded by melancholia. The presence of dyspepsia, worse in the morning, and vomiting caused by the odor of cooking, are additional indications.

Sulphur belongs among the most helpful remedies for uterine dis-

* Recommended by Dr. Henriques, Brit. Journal of Hom., p. 477, 1850.

placements with chronic inflammation and venous congestion of the pelvic organs. The menses are too late, too profuse and of too short duration; the blood thick, dark and excoriating; during the menses, pressure in the pit of the stomach, burning in the vagina, and after the flow, profuse, excoriating leucorrhœa. The general symptoms are of great importance, such as heat on top of the head with cold feet; burning in the soles of the feet with cramps in the calves of the legs and soles of the feet at night.

Terebinthina has repeatedly relieved a patient of mine from extreme tenesmus of the bladder with severe pain, bearing down and the severe straining finally causing bloody urine. The patient suffers from marked anteversion, chronic metritis and a small intra-mural fibroid which probably causes the displacement.

The list of remedies mentioned for the treatment of uterine displacements is by no means a complete one. Such a one would include nearly all the remedies of the materia medica. We have as yet nothing like specifics for these disorders and each case must be a study in itself. Each remedy must be selected according to the symptoms, independent of the form of displacement; hence there has been no attempt to give a separate list for each form of dislocation.

The writer desires to make a suggestion which appears to him to be of a practical character. *The most valuable symptoms for the selection of a remedy are those independent of the malposition.* The latter, in itself, is not a disease characterized by organic tissue changes and many of the most prominent symptoms are the result of purely mechanical conditions, such as pressure on the nerves, traction on the ligaments and congestion secondary to interference with the circulation. These symptoms, dependent upon mechanical conditions alone, resemble each other very closely, so much so that one or two remedies would cover them in nearly all cases; or it might be said that these symptoms, secondary to the displacement, are covered by a very large number of remedies. In either case, the prescriber is led astray. No one remedy will cure all diseases, nor can the physician cure many displacements where there are so many remedies equally indicated that the right one cannot be selected. It is the remote or constitutional symptoms which will enable him to decide.

When a surgeon is called to set a broken leg or reduce a dislocated wrist, he does not make careful note of all the symptoms, make his prescription and then set the leg or reduce the wrist. He will reverse

the order of procedure and prescribe by the symptoms present after he has restored the parts to their proper position. Why should not the same procedure apply to dislocation of the uterus? I cannot but believe that one cause of failure in treating these cases by remedies is that the symptoms the patients complain of the most, *i.e.* those dependent on the displacement, as bearing down in the pelvis, sacral pain, interference with the bladder functions, etc., are made the most prominent and important symptoms in selecting a remedy, to the neglect of constitutional symptoms and the peculiarities of the patient, or other remote symptoms, which would lead the prescriber to the proper remedy.

It may not be out of place in this paper to classify the cases according to the benefit derived from remedies, or, in other words to give the prognosis of the action of remedies for changes in the position of the uterus. So far as his experience goes, the writer would make the following divisions:

I. Remedies are of great value for displacements from traumatism when reduced immediately.

II. They do excellent service for comparatively recent displacements in unmarried continent women in poor general health, and to a slightly less degree in married nullipara in a similar state of health.

III. Good results are often obtained in displacements following parturition if they are recognized and properly treated soon after delivery.

IV. Some cases are occasionally relieved but seldom cured by remedies alone when the displacements are of long standing or complicated by lesions of the pelvic fascia and muscles. Mechanical treatment may relieve but it hardly ever cures.

This last clause brings us face to face with the question, do remedies restore the uterus to its normal position? The writer fully believes they are capable of so doing in most of the cases of minor displacements and sagging of that organ. In chronic cases, he has better results with medicinal combined with mechanical treatment, than with either method alone. He has seen some marked cases of retroversion and prolapsus of the second degree apparently entirely relieved by medicines without any other treatment, though these have been exceptional instances. While the suffering of the patients has disappeared, he has not yet in any one of them found the uterus restored to its normal position, though it seemed higher in the pelvis

than when the examination and diagnosis of the case were first made. Under such circumstances can the patient be considered cured?

There are few physicians who have not seen women, having displacement of the uterus to a marked degree, even complete procidentia, and who yet experienced no inconvenience, and felt perfectly well. Vedeler found 40 per cent. of the retroflexions examined by him gave rise to no symptoms whatever, even when the flexion was present to the highest degree. If such a large per cent. of retroflexions examined present no symptoms, surely there must be a very large per cent. among women who do not see a physician because they feel well. In other words, if an estimate of the proportion of retroflexions causing suffering can be made with Vedeler's observations as a basis, the majority of women having retroflexion of the uterus are not inconvenienced by it. On general principles, if a patient recovers from all her subjective symptoms she is considered cured. In a similar manner we speak of a patient being cured when she has recovered from an attack of pleurisy, even though extensive adhesions may be left behind. She is practically cured, though I am forced to believe that, *strictly speaking*, she is not cured.

The conditions in displacements of the uterus are peculiar; in the writer's experience, the women who do not suffer from them are exceptions to the rule. Any dislocation, be it of a limb, kidney, or uterus, is a departure from the normal condition, and not in accordance with the laws of health, and the writer must admit that a cure of the symptoms without restoration of the uterus to its proper position is not, *accurately speaking*, a cure of the patient, though she may be, practically, a well woman.

Discussion.

L. A. Phillips, M.D.: I suppose it is the intention of the Chairman to confine my remarks to the one division of this subject—that of symptomatic indications for remedies for the malpositions of the uterus. I may say that I am not quite ready to be confined to that question. It is one, which, taken by itself, I should feel was no question at all; the symptomatic indications alone are no guide to the treatment of this condition especially. These we cannot detect by subjective symptoms alone. We must include the objective symptoms, and combine local—that is, mechanical—treatment with remedial or symptomatic treatment. Then we are on grounds where

some degree of success may be expected; but remedies based alone upon symptomatic indications will not assist us. Our materia medica contains almost no symptoms of a reliable character touching the conditions; the provings of these remedies have not been made by women with a view to their relation to these irregularities. As to their effect in such directions it is all guesswork. In the majority of cases that we have, the symptoms are those of provers, or from clinical cases from which they are drawn without examination, without positive knowledge of any kind that might be due to this difficulty. The women of this and other medical associations have a duty to perform in this direction. It seems to me no one else can do it so well. They not only have the knowledge of anatomy and physiology and the normal conditions, but they can demonstrate in their own persons and upon such patients as they may induce to work with them, just what results may be obtained by the use of drugs, and I hope they may come to feel some time, the importance of this work and their real obligation to the profession as well as to themselves in this direction. It was said by the essayist that we could not depend upon the symptoms affecting the organs themselves, or upon those of the pelvic region as indications for remedies. I believe this is true, because the local symptoms are not those which are causative in the trouble, but which are the *effect* of malposition and of pressure mechanically, and those can only be relieved as you would relieve a dislocation of a joint by reducing the dislocation, and then if you have symptoms remaining, treat those symptoms by the indicated remedy. Only recent cases can we expect to effect by remedies. They are much more beneficially affected by the proper mechanical treatment combined with remedies, than by remedies alone. The effect of remedies without other treatment has not been found to be of any value whatever, as a rule, upon this displaced organ. They do not relieve the malposition; they may relieve some of the nervous reflex symptoms which come therefrom; but that is still doubtful, so that I feel that we must not expect from purely subjective symptoms to find a guide to the treatment of uterine displacements.

NEOPLASMS OF THE UTERUS—PATHOLGICAL INDICATIONS FOR TREATMENT.

By Lucy J. Pike, M.D., Lynn, Mass.

While it has always been considered absolutely necessary to remove all forms of neoplastic growth of the uterus, except in contra-indicated cases, as from age or the size of the growth, we now know that with the resources at our command this, in many instances, may be avoided.

The law of the similar teaches us that the drugs applicable to such pathological conditions must themselves be capable of producing changes of healthy tissue similar to those brought about by neoplastic growths, but owing to the present crude state of our method of drug proving, we know comparatively little of the dynamic power of drugs in producing tissue-change. Reasoning from effect to cause, from clinical observation, autopsies, and the physiological action of certain drugs, we can infer that when scientific experimentation is perfected and the system of provings is carried out as it should be, the results obtained will be consistent with the only known law of cure.

Perhaps that form of neoplasm most frequently met with, and one for which few writers recommend other than surgical treatment, is the uterine polypus; but that many have been cured by purely therapeutical means is a fact well proven by many homœopaths. There are several varieties of polypi and many drugs applicable to them. For that form of mucous polypi in which the color is deep red, and the hemorrhage profuse, either *Phosph.*, *Sanguinaria* or *Teucrium* is specific. If the discharge is more mucous in character, thick and viscid, we may find more help from either the *Carbonate, Phosphate* or *Iodide of lime.* These salts act upon the lymphatic glandular system and cause, by absorption, a disintegration of tumors of this nature. It should, of course, be left to the presence of concomitant

symptoms to determine the choice of which drug of a certain class should be employed. If there is little vascularity and little, if any, characteristic discharge, the tumor partaking more of a fibrous nature, *Baryta carb.*, *Conium*, *Graphites* and *Lycopodium* may be thought of. If the discharge is thin, watery, purulent and offensive, frequent and abundant hemorrhage from the constant irritation of the mucous membrane, we then should have recourse to *Argentum nitricum*, *Iodine*, *Hydrastis*, *Sabina*, *Urtica urens* and *Phosphorus*.

But it is with fibroids that drugs are winning the victory. Foremost among them stands Ergot. The action of this drug in producing uterine contractions is well known, and the efficacy of its power is proportionate to the amount of the hypertrophy of the organ, so that unless the fibres are well developed Ergot will prove useless. Whether its action be direct or secondary through the vaso-motor system, certain it is that it is not purely dynamo-mechanical, for there are two vital forces at work in the expulsion of a tumor. Not only is the circulation impeded and the course of the bloodvessels disturbed by direct compression of the uterine fibres, but the calibre of the vessels themselves is diminished by reason of the contraction of the muscular tissue of the arterial coats. This being the case the submucous tumors may call into play only the concentric action of the uterus, while in the expulsion of either the intramural or subperitoneal variety the process must be more pathological, they being literally "starved out" by reason of a diminution of the blood supply. Yet the result of the treatment of a subperitoneal tumor is doubtful, since not only is their position disadvantageous to cure, but the fibres are poorly developed and consequently have not much contractile power. Professor Byford, in his last edition of his work on gynæcology, says that good results may be experienced from treatment of these tumors on four conditions.

These are: Smoothness of contour, hemorrhage, lengthened uterine cavity and elasticity. A smooth, round tumor denotes, for the most part, uniform textural development, hemorrhage, a certain proximity to the mucous membrane, a lengthened cavity, a great increase in the length and strength of the fibres; and elasticity assures us of the fact that cartilaginoid or calcareous degeneration has not begun in the tumor.

An uneven, nodulated tumor may be composed of many separate solid masses. These displace and prevent the growth of the fibres to

such an extent as to render contractions inefficient. When hemorrhage is not present, the tumor is probably near the serous surface, and consequently not surrounded by fibres. A short cavity denotes short, undeveloped fibres, while hardness is indicative of unimpressible induration. Closely allied in its action to Ergot is *Mistletoe*, but, unlike Ergot, it does not depend upon uterine hypertrophy to develop its action, so that it should be applicable in cases where Ergot is useless, when the development of the fibrous structures is so slight that it has no contractile power, and if expelled at all, it must be by the uterine contraction alone.

Passing on to malignant neoplasms, therapeutics have thus far been disappointing. Doubtless, many of the symptoms may be relieved by such remedies as *Arsenicum*, *Lachesis*, *Mercurius*, *Conisirus* and *Hydrastis*, but as yet there has been found no specific to repair the diseased tissue, although in the hands of some physicians, certain drugs have gained a reputation. Professor John Clay, in the London *Lancet*, June, 1880, reports several cases of cancer cured by the action of *Chian turpentine*. The first, a severe scirrhus which had so invaded the uterus and destroyed its tissues to such an extent that three fingers were easily admitted into the os. The fourth day after taking the drug there was great improvement, the os had contracted and the cancerous infiltration was much reduced. The turpentine was taken for twelve weeks with absolute improvement. Another was a case of epithelioma, the uterine cavity being almost filled with the growth; hemorrhage profuse. In the words of the author "it was literally melted away in four or five weeks." A third case of epithelioma which involved the entire uterus, yielded readily to the action of this drug, the patient making a good recovery at the end of fourteen weeks, the growth almost entirely disappearing. He reports several other similar cases. In speaking of the action of this drug, he says:

"The turpentine appears to act upon the periphery of the growth with great vigor, causing the speedy disappearance of what is usually termed the cancerous infiltration and thereby arresting the further development of the tumor. It produces equally efficient results on the whole mass, seemingly destroying its vitality, but more slowly. It appears to dissolve all the cancer cells, leaving the vessels to become subsequently atrophied and the firmer structures to gradually gain a comparatively normal condition. It is a most efficient ano-

dyne, causing an entire cessation of pain in a few days and far more effectually than any sedative that I have ever given. In the cases I have described, no sedative was employed in any instance, although in some cases, when great pain had existed previously to commencing the treatment, large doses had been given. Whether this arrest of pain arises from the death of the tumor or is due to there being no longer irritation of the sentient nerves (in consequence of tension being withdrawn by the removal of the cells), the fact is the same. If, after the use of the remedy for some weeks, one of these cases were examined by a stranger for the first time, he would probably conclude that it was one of commencing malignant disease by reason of the irregularities of its surface. The effect of the remedy being first to remove the cellular structures, any loss of tissue produced by the invasion of the disease cannot be restored, and hence the irregular touch and appearance even after cicatrization. The arrest of the hemorrhagic discharge and the remarkable freedom from glandular affections, after a lengthened use of the turpentine, are especially important factors in materially aiding the removal of the cachexia and of improving the general condition of the patient."

Spencer Wells recommends highly the use of Chloride of calcium, and we have on record the result of an autopsy on a patient who had died of pneumonia. Six months previous to her death she had been taking Chloride of calcium to reduce the tumor. The autopsy revealed a mass of neoplastic tissue evidently in a state of decay. Dr. Storer, before the British Gynæcological Society, asserted that he found at an autopsy a similar case of a shrivelled fibroid that was undergoing fatty degeneration. Grauvogel puts great faith in *Lapis Albus* for genuine scirrhus if used before the tissue breaks down. Schüssler recommends *Silicea.* I have, myself, seen more improvement in the tissue from the use of *Sulphide of arsenic* in one case and *Ferrum arseniate* in another, but in both cases it was where cancer was suspected and the drug was given at the very start of the invasion of the tissue. Two cases of epithelioma seem worth mentioning: Both women came to be treated for secondary syphilis, and on examination it was found that there was a well-defined epithelioma, the microscope revealing a papillary villous growth, with the characteristic "onion-like" arrangement of cells, so that the question of differentiation was decided. Both these patients were placed upon *Iodide of potassium* with a local application of *yellow.* With the

disappearance of the syphilis came decided improvement of the epithelioma, so much so that the intended operation was abandoned. Unfortunately, they both passed out of my hands, so that an absolute cure cannot be cited. The question may arise, was there any connection between the syphilis and cancer—is syphilis a predisposing cause? In several cases of cancer I have found a history of syphilis. *Cundurango* and *Jaborandi* seemed to promise some hope in the treatment of these malignant growths, but, alas! that hope has been so long deferred that the physician's heart has long since been made sick and he has been obliged to have recourse to the knife. *Arsenicum* and *Lachesis* certainly often improve the symptoms, and doubtless the former would promote the cicatrization of tissue—if softened by Ergot or some other drug—and the latter should tend to the decrease of the morbid process by setting up an opposing decomposition.

NEOPLASMS OF THE UTERUS.—SYMPTOMATIC INDICATIONS FOR TREATMENT.

By S. P. Hedges, M.D., Chicago, Ill.

A careful study of the various new growths to which the uterus is subject shows us that no other organ or tissue of the body is more liable to these peculiar, morbid developments. Indeed, when one has exhausted the investigation of the various neoplasms of the uterus he will find very few new forms elsewhere in the entire anatomical system. Hence the richness of the subject increases its interest. The several different tissues of the uterus have each a special tendency to peculiar growths. Each tissue, whether fibrous, muscular or mucous, gives its own characteristic to the morbid development from its stroma. And the modern nomenclature largely follows these histological facts in giving names to each new growth.

The portion of the subject assigned me in the discussion is given at the head of this paper. In treating this question I shall take as broad ground as possible, and hope I may not touch on territory belonging to another.

The uterus is a small organ and the growths that may find a lodgment within it are various and dissimilar. But the symptoms by which they announce themselves are not by any means so varied and dissimilar. And herein lies one of the difficulties in a paper which has to be fenced in so exactly. The symptomatic indications of a tumor in the uterus are general rather than specific. By these symptoms we learn there is something there. But these symptoms must be assisted by other indications, both specific and constitutional, and by study and classification of *all* the symptoms, before a true diagnosis can be made of the kind of growth or tumor. I have thought best not to include in this paper the microscopic indications, without which it is often impossible to make a diagnosis. I shall confine myself to the subjective and objective symptoms to be obtained from

the patient and by examination of patient. This will include often a history of the patient and much that is in the domain of etiology. The causes acting as predisposing to the neoplasms are of great importance in a proper and full symptomatology of any case.

Then, again, I shall treat this subject in the line of diagnosis, general and differential, rather than with a view to therapeutics. While the general subject before the bureau is Uterine Therapeutics, I am informed that others will cover the therapeutic indications.

Having thus defined the nature and field of this paper and prepared the way to a clear understanding of it, I call your attention to the more particular work before us.

The neoplasms of the uterus are divided into two great classes, viz., benign and malignant. It is not always possible by subjective and objective symptoms alone to tell which we have to deal with. And this is true more especially early in the case, when it is so important to decide aright. Later in the case the signs of malignant growths make the differentiation clear enough. What we want to learn is how to distinguish them *early*, and this is the point of present interest in such studies.

The close attention which is now given to uterine and pelvic diseases is in the line of early diagnosis. And nowhere is this so vital to success as in malignant affections of the uterus. The recent view that cancer is primarily of local origin and only constitutional as a secondary result, makes an early diagnosis the more necessary. Acting on this hypothesis the sooner a cancerous growth is discovered the earlier it can be removed, before any of the adjacent glands or tissues are infiltrated by the destroying cells. I desire to emphasize the importance of this point,—early and correct diagnosis. While the uterus is so frequently attacked by new growths, by far the largest number belong to the class of fibroids in its widest limit. I wish to include in this class all the *hard*, firm tumors, whether springing from the connective tissues, as purely fibroids, or from the muscular tissue, as the myomata; and I also wish to include those tumors of mixed tissue, as the myo-fibroma and myxo-fibroma and myxoma, as well as those that retain their firm, smooth, rounded and circumscribed form. Besides these neoplasms, I shall include in the study of the common symptoms produced by intra-uterine growths, the whole class of mucous and fibrous polypi, or mucous tissue growths, as well as the glandular polypi which start from the glands as re-

tention cysts. Here we have nearly all the benign neoplasms of the uterus, those especially of tumor form. When we have observed the symptoms common to these, yet more or less symptomatic, we will note the points of difference and where they are to be distinguished from each other. These conditions of growth, whatever the tissue involved, give rise to a common line of symptoms, and we can best study them together. Next, let us consider the accident of *location*, for this is a controlling cause for a distinctive line of symptoms which will aid in forming our diagnosis. For instance, if one of these hard tumors is situated in the lower anterior segment of the womb or cervix, as it grows, we have symptoms of vesical irritation, frequent and painful micturition, or retention even, and when low enough to press on the urethra, symptoms of cystitis may occur. When these symptoms are obstinate, though there are no other pains and no hemorrhage, we may think of a uterine fibroid.

Fibroids have properly been divided into submucous, interstitial and subperitoneal, according to location. This division is not arbitrary, but necessary, and our study of symptomatic indications will not be complete until we accurately classify our tumor into one of these divisions. Treatment cannot be undertaken until we know just what and where the growth is.

Just here I wish to call attention to the very startling statistics as to the frequency with which these tumors are met with. It will be one of the valuable helps in weighing probabilities as to kind of growth. According to Dr. Avernus' statistics fibroid tumors occur in twelve per cent. of all white women over forty. While Bayle & Klob make the percentage much larger, even forty per cent. of women over forty years, especially among black women. It is well known that they are much more frequently found in colored women and also at an earlier age, even under thirty years. But colored women are less liable to cancerous affections of the womb and cysts of the ovary and adnexa. All these facts are important in summing up the symptoms which go to make a diagnosis. Tumors, whether myoma or fibroma, so long as they are small or favorably located so as not to cause irritation and congestion, may not give rise to any symptoms. The severity or amount of disturbance bears no relation to the size of growth. These neoplasms are of slow growth as a rule. In this respect they differ from the *soft* tumors of their class, viz., the myxomata or mucous tissue tumors, including the mucous polypi.

As fibroids never appear before puberty and rarely before the age of thirty there is generally, antedating the appearance, a more or less protracted history of chronic metritis, catarrh of the endometrium, or irregular and profuse menses. This is an important guide to call us to more thorough investigation.

The subjective symptoms are very variable, sometimes few, at other times many, but there are none so uniformly present as to make them diagnostic.

There are two symptoms uniformly present in this class of uterine neoplasms, viz., hemorrhage and pain. Sometimes the former is preceded by gradually increasing frequency of menstruation. The flow becomes more and more profuse with each recurring period, and the intervals between are steadily shortened until there is established complete irregularity with metrorrhagia. It occurs again, but very rarely, that there is a sudden and great loss of blood, coming with a gush, and often so as to greatly reduce the patient. And this may recur irregularly but always suddenly. This hemorrhage may be distinguished from that of malignant or soft polypoid growths in that it is usually unattended at first by serous and slimy leucorrhœal discharge, being a brighter, fresher blood, and also coming more in paroxysms with free intervals. The more severe these attacks the greater the certainty of a submucous growth. The interstitial tumors have a somewhat lesser hemorrhage; while the subperitoneal fibroids or myomata are seldom attended by this loss; only when the origin of the pedicle has pushed towards the uterine mucosa. We make this point, then, that the amount and character of the hemorrhage is symptomatic of the location of the fibroid.

There is one form of interstitial myomata, the large, soft variety, where the growth is diffuse and the mucosa extremely vascular. In this form there are sudden and terrible hemorrhages rapidly exsanguinating the patient. The bleeding recurs, and more frequently. The menorrhagia changes to a metrorrhagia, irregular but frequent. The patient becomes anæmic. The anæmia is distinguished from that of the cancerous cachexia, as there is not the peculiar waxy pallor and other constitutional indications. Such a type of hemorrhage is more like that from malignant uterine tumors. Yet in the intraparietal, soft, diffuse fibroid, which is very difficult to diagnosticate, there is no local, discoverable cause to account for it, while a local cause is always present in cervical or uterine cancer.

The second symptom, uniformly present, is pain. The severity, continuance and character of pain is variable. Small growths have little pain unless, as in the instance given above, their location is a cause of aggravating this serious symptom. Usually pain is in proportion to rapidity of growth and size. Sudden attacks of pain in the uterus, persistent in their recurrence, and from no defined cause, starting from the same place and stinging and lancinating in character, are suspicions of uterine neoplasm. The amount of pain is not characteristic of the kind of fibroid, to the degree that the hemorrhage is, yet the subperitoneal growth probably gives rise to the greatest distress as it attains such large dimensions. While the tumors are smaller the pain is corresponding to the pressure, position and kind of nervous and circulatory disturbance. As the growth enlarges there is a different kind of pain, described as a stretching, dragging sensation. Interstitial or submucous fibroids are more likely to give rise to this symptom. And as these growths continue to enlarge, a third kind of pain is noticed. This is a heavy, bearing-down pain with pressure, attended by increased weight and discomfort in the pelvis. In a submucous fibroid where the cavity of the uterus is filled the pressure sets up labor-like pains of an expulsive character. The growth presses on the os, which often opens and expels it under these muscular contractions. Even enucleation has been produced and the tumor pushed into the vagina, the cervix closing again and pain ceasing. Not so desirable a result occurs when the tumor has a broad and sessile pedicle, in which case the pains increase and demand digital examination by the physician, when through an open os the diagnosis is readily made. In intraparietal growths the pain is not at all characteristic or symptomatic. After a time by their size they cause uterine deviations and pressure. The small, encapsuled interstitial myomata often cause flexions and versions of the uterus. In anteversions from this cause there is great pain from the strangury induced by the increased pressure. As these intramural growths are located in one or the other of the four sides of the uterus, by their growth and size and the attendant morbid development of the uterine tissues, they bring on displacements of a very painful character, according to the location and pressure. Thus you see we may have distressing rectal or vesical symptoms, dysuria, cystitis, strangury or retention on one side, and constipation, hemorrhoids or ovarian neuralgia on the other.

In subperitoneal fibroids there is no pain, or little pain, when they are small. When, however, they are located low on the body of the uterus or on the cervix, there is pain from the start, and these growths here are more dangerous every way. This is from the confined space and pressure causing the more trouble. As subperitoneal fibromata attain large size, the pain becomes a constant symptom. As a true fibroid is hard and may be nodulated, this causes irritation and inflammation of the peritoneum. Adhesions occur, increasing the pain and drawing. In short, the pain of these tumors is characteristic of all internal abdominal growths. Sometimes not more painful than pregnancy; at others there is a constant, agonizing pain. But the pain from a benign fibroid of any class is quite distinct from that of malignant growths, as will be seen farther on. While a careful study of the variety, course and degree of suffering from uterine fibroids will aid us as a symptom in arriving at a correct opinion, we must admit that they are not distinctively diagnostic.

Before leaving this branch of the subject I wish to call attention to one important kind of pain which often arises from small, slow-growing tumors. I have noticed more than a few times in my experience in such cases a line of hysterical symptoms, occurring at the menstrual period with peculiar regularity. The patients were not of an hysterical type. The symptoms were recent and unusual. There was more or less of discomfort in the uterus. Palpation was painful. After menses, especially, the uterus was sensitive. Parvin says, "Many patients so affected are simply called hysterical," because the tumors are still too small to be recognized by palpation, and the uterus may neither be enlarged, displaced nor otherwise affected. Indeed no other disease so well deserves the name as this one. Hysteria or pain in the uterus is, in the early stages, the most important, and often almost the only symptom; be watchful and investigate these cases.

The prominence I have given to the foregoing consideration of the two symptoms of hemorrhage and pain, is because reference to the points made will help to classify and distinguish the other forms of uterine neoplasms. The remaining symptoms developed by myomata of the uterus are variable and not distinctly symptomatic. Simple leucorrhœa at first changes to an albuminous and finally to a muco-purulent discharge. When the latter is observed we may be sure that ulceration has occurred. The leucorrhœa increases with the size of the growth and the greater local congestions of the irritated mucous

membrane. The hemorrhage, pain and leucorrhœa steadily increase the debility of the patient and bring on a profound anæmia. Then we have a long train of reflex uterine symptoms, headache, nausea, anorexia, vomiting, pale and coated tongue, cardialgia and palpitation, insomnia, emaciation, nervous twitchings and fainting. These all follow mainly from the loss of blood and pain, and should the myomata be discharged spontaneously, as is sometimes the case, or by surgical interference, the patient at once regains color, flesh and strength in a remarkable degree. This demonstrates the freedom of the hard fibroids and myomata from any malignant tendency. In these firm and circumscribed growths, including all pediculated or polypoid myomata, the danger is from the above causes only. They are benign and endanger life only by secondary conditions. They never infiltrate adjacent tissues or glands. They displace them as they grow. Pressure may cause adhesions by inflammation, but no destructive change of tissue.

The last train of symptoms arises from mechanical pressure. In submucous tumors, including the polypi of all forms, pressure increases local discharges, resulting in increased hemorrhages, mucopurulent discharges, and all the train of vesical and rectal suffering. These are also present with the very large subperitoneal myomata, together with varices, cramps, numbness of extremities, hemorrhoids, œdema of vulva and lower limbs.

We have now followed out the whole line of subjective symptoms, and have noticed that only two are always present. And these are not diagnostic. They are symptomatic and important as indications. We will now turn to objective symptoms, which are well marked, and their indications taken with the subjective symptoms make diagnosis usually easy, except in very complicated cases. In any case having hemorrhage, pain and the other indications suspicious of uterine growth, it is necessary to make a physical exploration. If the symptoms point toward a mucous or submucous growth, a digital examination should be made. This will reveal an os more or less open as showing a pressure from within. Sometimes the polypus is in the vagina, the pedicle hanging from the os or from within the cervix. Sometimes the tumor can be felt within the os. If the finger can enter and locate the pedicle and its form and size, it is distinctive. If a polypus can be rotated on its vertical axis readily, it has a narrow pedicle, otherwise, a broad or sessile one. If the surface of the tumor is

smooth and soft and easily bleeds, it is a mucous polypus. The degree of softness may verge on to the myxoma or colloid polyp, and only microscopic examination can determine. If the tumor is hard, round and smooth, although at times irregular in outline, and insensible to touch, it is fibroid or myoma. The harder the surface the more likely connective tissue is in excess and it is a fibroid. A myoma is smooth and more regularly round and a little softer. The softer the tumor and more vascular, the greater the mucous or albuminous discharge, as a rule. Where these polypoid growths have grown to the size of a robin's egg and larger, we will find the uterus enlarged, its cavity deeper and its walls thickened, congested and sensitive. If this is the case, with profuse flooding, and we find no tumor near the os, we must dilate the cervix and explore with care the intra-uterine walls. If there is a firm, circumscribed bulging in one of the walls, which is thicker than the other, we may find an interstitial fibroid. If it is nearest the mucous surface and growing in the line of least resistance, it may be enucleated at once and so end the trouble. Always explore for others after finding one. They are found in couples and more. These intramural myomata are sometimes found in the cervix. Here they are easily located. They often give rise to very distressing suffering. By their hardness and bulging when small they are easy to determine; but when large the differential diagnosis must be made with care. They greatly complicate and endanger labor at the time when present. Fibroma of cervix or carcinoma, at full term, complicating labor, may be known from the natural or œdematous cervix by this diagnostic point. During the interval between the labor pains the fibroma or carcinoma will continue dense and hard, while the natural or œdematous cervix will relax. Many times a fibroma or carcinoma reveal their presence *before* labor by pain and hemorrhage.

In interstitial fibroids, situated higher up and at the fundus, we need the conjoined use of the sound, with the finger in the anterior fornix to detect thickening in the anterior wall, or in the rectum to notice thickening or bulging in the posterior wall. The firmness and rounded hardness of the growth can be told from hypertrophy or swelling of the uterine walls. These examinations of conjoined bimanual and sound will clear up these cases from all simple displacements.

The larger the submucous tumor the deeper the sound will enter the uterine canal, also to nearly the same degree of depth with an in-

terstitial growth. But with subserous fibroids the cavity is not enlarged. Large interstitial fibroids by their presence cause more or less hypertrophy of the uterine walls. This is attended by a great enlargement of bloodvessels. On this account we have a very valuable diagnostic symptom. This is a sound like the placental souffle or bruit, which enables us to decide that the tumor is not only interstitial, but also often to decide whether the tumor is nearer the mucous membrane or the serous membrane. By this means of diagnosis we have been able to operate by enucleation rather than by laparotomy. In using sound we must assure ourselves, by waiting, that there is no pregnancy, for it may be there are both tumor and pregnancy. Usually in submucous and interstitial growths the uterus is low, but in subperitoneal fibroids the os is high. If, conjoined with this, the sound gives a normal uterine cavity and direction the growth is subperitoneal. This tumor attains the largest size. If it is attached by a long and narrow pedicle we find it very movable. It can be separated from the womb and moved independently of it. If the attachment to the womb is short and sessile the diagnosis will be more difficult. A fibroid is characterized by hardness. By palpitation and bimanual methods the surface indications can be well made out. It is well defined and solid. If closely attached to the uterus it moves as the uterus is moved. Percussion gives a perfectly dull sound if the intestines do not intervene. Auscultation gives a bruit if pedicle is large, but none if pedicle is small. By bimanual examination, in subperitoneal fibroid, the uterus moves independently, but with interstitial the uterus and tumor seem one.

By external examination, when there is cystic degeneration in any part of a fibroid tumor, there will be fluctuation. This shows it to be a fibro-cystic tumor.

When the subperitoneal myomata become large changes occur in them by degeneration, inflammation, and adhesions, so that difficult questions of differential diagnosis arise. This is a department in itself, and does not further come under the scope of this discussion.

There are one or two other forms of neoplastic growth with which we have to deal, which are interesting in themselves and from the new light which has been shed upon them by modern research and the microscope. While not usually of individual size to be separately handled and examined it is found that they are none the less neoplasms.

They are called by a variety of names, such as sessile polypoids,

fungous vegetations, fungous endometritis, endometritis hyperplastica, and cauliflower excrescence, but the better name is *adenoma*.

Another class, differing somewhat anatomically from the adenomata, is called a villous and sarcomatous degeneration of the endometrium, or papillomata. This last name is histologically descriptive. The symptoms are generally sacral pain, uterine colic, spasmodic pains attended by severe flooding at menstruation, and all the time more or less free water discharge.

These conditions are produced by a hyperplastic thickening of the uterine mucosa, or proliferation of the endometrium. On examination we notice a velvety feeling to the mucous membrane. It is red, covered with sessile, minute, club-shaped polypi, from the size of a millet-seed to that of a pea, of spongy consistency, easily torn, and bleeding profusely, generally without sensation. This last symptom is important to differentiate from a diffuse sarcoma, which it resembles at one stage, but which is extremely sore and painful to touch.

In company with this growth we may often find a large mucous polypus or fibroid tumor. The symptoms preceding these cases as they come into our hands give generally an interesting history which needs to be considered in summing up our case. Adenomata and papillomata follow after chronic endometritis, subinvolution, retroverted uteri, gonorrhœal infection, and neglected cases of laceration of the cervix. These neoplasms may attack the cervix or endometrium. Schrœder has remarked in regard to these cases, and it is an aid in differential diagnosis, "that in his experience malignant diseases of the endometrium are usually found in old maids and sterile women, while malignant diseases of the cervix are almost always found in women who have borne children." And this remark of Schrœder's brings us to consider that adenomata, and to a still greater degree papillomata, lie on the line between benign and malignant growths. So long as these growths are in isolated patches, with free and healthy mucous membrane between, they are most certainly benign. But when these vegetations grow large, and crowd close together, and involve all the mucosa, they not only give rise to a fear that they may be a diffuse sarcoma, but it would not be unnatural to feel that a truly benign growth at the start had degenerated into a sarcoma or carcinoma. This view is held by many able men. Only the microscope can decide in these cases. And it requires, in many cases of mixed histological growths, an expert with the microscope,

and many examinations of the tumor, taken from different locations and before degeneration occurs, in order to verify the exact diagnosis.

Whether normal tissue, even in morbid conditions, or neoplasms of normal tissue, may or can degenerate into malignant cancerous conditions, or whether malignant growths are always de novo, remains for the microscopist, pathologist, and histologist to determine. There are no symptomatic indications early enough in the cases to be of any service in saving life. The last tissue changes which are so distinctively symptomatic come too late, though they are truly diagnostic. Goodale sums this up in speaking of this stage of a sarcomatous degeneration of the endometrium, as he terms it. He says: "Its diffuse growth, absence of capsule, friability, placenta-like structure to the feel, and later its excessive fœtor, stamp it with an almost unquestionable microscopic individuality."

In closing this paper I would say that, when one considers the variety of the benign neoplasms of the uterus and their painful and dangerous effects, it may seem strange that so little that is exact in diagnosis can be learned from a study of the symptomatic indications. Were we alone to depend on subjective symptoms we should continue to grope in the dark. The objective symptoms and physical examinations give very clear data to arrive at certainty in diagnosis. Yet here we are at fault in those growths and tissue changes which are formed along the boundary of malignant growth. Here only the microscope of an expert histological pathologist can aid us to a true diagnosis. But while we see that symptomatology can only go part way with us we must not, therefore, discard her help. Let us more and more study and perfect the system until it shall become all that is possible as an aid in the good work of relieving and curing our suffering mothers and daughters.

SUBINVOLUTION OF THE UTERUS.—PATHOLOGICAL INDICATIONS FOR MEDICINES.

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Before entering upon the subject of the remedies pathologically indicated in the condition forming the subject of this paper, it will be proper for me to define what is meant by subinvolution, and the conditions under which it appears.

While there are certain general pathological conditions usually present in all cases of subinvolution, namely, venous stasis, enlargement, uterine catarrh, and muscular paresis, I think there are three causes of this condition. And as the treatment of the disease is modified by the nature of the cause, the subdivision of the etiology is important.

I would classify the causes as follows: (1) *Menstrual*, or those cases caused by or connected with abnormal menstruation. (2) *Abortivant*, or those caused by miscarriages occurring at any period of pregnancy. (3) *Post-partum*, those which occur after labor.

Menstrual subinvolution may occur at any period of a woman's life. It may appear with the onset of puberty, and occur during the first menstruation.

When a girl's first menses appear too profusely and occur too frequently, she is surely suffering from a degree of uterine subinvolution. She may have caught a cold just before the appearance of the first menstrual effort, congestion of the uterus and uterine catarrh set in, and the first stage of subinvolution obtains. Now, unless that girl is subjected to prompt and efficient treatment she will suffer from this ailment all her life. She will be subject to miscarriages, to painful labors, and after each one there will be a new accession to the malady.

I have found the uterus of girls of sixteen large and heavy, and with an increased depth of cavity of one-quarter to half an inch,

and with an unmistakable catarrh of the mucous lining of the cavity and cervical canal.

The pathological condition in menstrual subinvolution has its basis in an exaggerated physiological congestion. An intense example of this is membranous dysmenorrhœa. This unnatural congestion does not completely subside after the menstrual flow ceases, and there is left a venous stasis in a womb heavier and deeper than normal.

If this morbid process is not arrested the end is generally areolar hyperplasia. The medicines which are pathologically indicated in this variety must include those which, by their pathogenetic action, are capable of causing a similar pathological condition in the genital organs. In other words, they must cause, when given to the healthy woman—(1) exaggerated menstrual congestion; (2) profuse and too frequent menses; (3) ovarian irritation; (4) passive venous stasis; (5) uterine catarrh, and (6) enlargement of the uterus.

The principal drugs capable of causing these conditions are *Sabina, Turpentine, Sepia, Cyclamen, Pulsatilla, Millefolium, Tanacetum, Kali permanganatum, Oxalic acid, Senecio, Trillium, Platina, Aurum, Ustilago*, and a few others.

The provings of all these drugs show that their primary effect on the uterus must be an active congestion; so much so that the blood-vessels of the endometrium are flushed, and pour forth a larger amount of blood than should normally be discharged at the menstrual period. This condition implies a certain amount of enlargement or swelling of the parenchyma of the uterus.

How they do this, is not at present a question easy to answer.

Their secondary effect is just what we might expect. After the abnormal menses, the involution of the uterus is defective. The bloodvessels do not regain their normal tone during the inter-menstrual period. The next menstrual period aggravates the condition, the tissues of the uterus become relaxed, and we get what is now considered the chief cause of uterine flexions, and the so-called chronic metritis—venous stasis.

In some cases of dysmenorrhœa—notably, the membranous—there is an increase of temperature. The uterus becomes inflamed, just as we find it after abortions.

Such cases find a *similimum* in Sabina, Turpentine, Tanacetum, Belladonna and Veratrum viride.

Sabina heads the list of remedies for subinvolution after the

menses. It is the typical remedy, and, if properly used, will cure a majority of cases. Sepia is to chronic cases what Sabina is to acute. Lilium, if its pathogenesis was verified, would stand somewhere between the two. But, notwithstanding the prominence of the genital symptoms of Lilium, it has been a disappointment.

Senecio has rarely disappointed me; it has done better in my hands than Pulsatilla.

There are cases which call for the use of other remedies than those mentioned above. Hydrastis has been very successful in some cases when *pain* was notably absent, but the flow great, and involution imperfect. In rare cases China (or Arsenite of quinia) has acted well. Arsenite of gold has been very useful in my hands.

The remedy selected should be given frequently just before and during the menses, and more rarely but continuously through the inter-menstrual period.

The variety of uterine subinvolution which obtains after abortions is more usually inflammatory, especially if there is retained placenta or portions of the membranes. I have known a few cases where the fœtus, placenta and membrane were expelled entire, without the loss of more than a drachm of blood. In these cases I observed that the involution was perfect—as perfect as after a normal labor. But such cases are very rare. The majority of cases of abortion are followed by intense congestion or acute inflammation, and a perfect involution is the exception. With the subinvolution we usually find a hypertrophy of connective tissue, which, if there are many miscarriages, is soon followed by areolar hyperplasia. To the above conditions we can charge the sterility which is the result, so often, of even one or repeated miscarriages.

The perfect homœopathic remedy for subinvolution after miscarriage should possess the power of causing abortion. This power would carry with it the resultant inflammation, congestion, and arrest of involution, followed by hypertrophy.

The chief of these drugs are *Sabina*, *Ustilago*, *Caulophyllum*, *Cimicifuga*, *Ruta*, *Millefolium*, *Kali permanganatum*, *Aloes*, *Asarum*, *Gossypium*, *Quinine*, *Hydrastis*, *Laurus sassafras*, *Terebinth.*, *Hedeoma*, *Tanacetum*, and a few others.

I do not mean to imply that all or any of the above drugs will usually cause miscarriage. On the contrary, their administration in toxic and dangerous doses rarely causes abortion. It is only from

the rare cases that occur that we get the history of abortion and its dangerous consequences.

Of the above not all cause metritis. Only Sabina, Ruta, Kali perman., Terebinth. and Hedeoma have been known to have this result follow their use.

It is not possible in the present state of our materia medica to give the pathological indications for each of the above medicines. We have no experimental data of a pathological character to guide us. We know to a certainty that they all must cause the usual pathological changes, in the uterus and appendages, which are seen after abortions. It is presumable that no two of these cause the same pathological state, but we do not know enough about them to differentiate. The selection of the remedy must after all be done by comparing its known symptoms with the case in hand.

For example, the abortion caused by Gossypium or Caulophyllum must differ widely from one caused by Turpentine or Sabina, and this difference is told us by the characteristic symptoms in a most unmistakable language.

I will only add one observation as to dose. The more nearly the symptoms approach the acute or inflammatory condition, the smaller should be the dose. As the condition becomes chronic, use larger.

Subinvolution of the Uterus after Labor is the variety usually referred to in our text-books, but it is, perhaps, not more common than those varieties which occur after miscarriages. Lawson Tait asserts that the "neglect of an abortion or miscarriage is generally more serious than labors" in their influence on the imperfect involutions of the uterus.

The process of involution of the uterus is not completed, even by a perfectly healthy woman, in less than thirty or thirty-five days, and a great many accidents tend to delay it. All inflammatory attacks in the pelvis after labor, mental shocks, the suppression of milk, retention of pieces of the placenta, the getting up too soon after labor, too long lactation, and in some women a constitutional tendency to laxity of uterine tissues—all tend to prevent normal involution.

A woman should, as a rule, not commence to menstruate, if she nurses the child, until seven or eight months after confinement, nor for two or three months, if she does not nurse her child.

If, therefore, a patient informs us that she has been regularly and profusely unwell ever since her confinement, or that she has had a

continuous, colored discharge, with occasional floodings, we may at once conclude that she is suffering from subinvolution. In such a case an examination should at once be made with the finger, speculum and sound. The cervix will be found large and thick, the os insufficiently closed, but not patent enough to admit the finger. There will also be a copious, muco-purulent discharge, existing between the menstrual periods, and these are likely to be too frequent, too prolonged and too profuse. The sound will show that the depth of the uterus will be found to be half an inch or an inch in excess of the normal. We must not forget that not only the uterus but the Fallopian tubes, broad ligaments and ovaries, will all sympathize with the uterine subinvolution.

The pathological condition of the uterus, when subinvolution exists, is (1) congestion of the parenchyma; (2) hypergenesis of connective tissue. The congestion is due to an atonic condition of the uterine bloodvessels; the hypertrophy, to an excess of nutrition, from an abnormal blood-supply. The ultimate result is areolar hyperplasia.

I have thus briefly outlined the pathological condition existing in subinvolution, in order that I may be better understood when giving the pathological indications for the remedies.

According to our law of cure, the kind of subinvolution occurring after labor should call for medicines which, when given to a healthy woman just before her accouchement is due, should be capable of causing premature, violent labor.

This premature labor would be unnatural, and, therefore, pathological. No drug with which we are acquainted can cause a perfectly normal labor when given before the woman should be normally confined. Any drug which can bring about premature labor forcibly will be capable of causing, as a consequence, subinvolution of the uterus and its attendant conditions.

Only a few drugs are capable of such effect. In some instances *Secale cornutum*, *Ustilago maidis*, *Phoradendron*, *Caulophyllin*, *Cimicifuga*, *Gossypium*, and possibly Sabina, may be capable of it.

Among other remedies, not parturient, but indicated in subinvolution, may be mentioned *Nux vomica*, *Cinnamon*, *China* (Quinine), *Thuja*, *Hydrastis*, *Digitalis*, *Convallaria*, *Sepia* and *Arnica*.

Ergot causes a continuous contraction of the muscular fibres of the uterine body and cervix, and, at the same time, of the bloodvessels.

If a large dose is given soon after labor, the uterus firmly contracts, and the contraction is painful. If clots are present in the uterus, they are expelled as a rule, but this rule is subject to exceptions. The most recent axiom of obstetricians is "never to give Ergot when there is anything in the uterus," *i.e.*, wholly within its cavity. Why? Because the contraction includes the cervix as well as the body, and any foreign body is more likely to be RETAINED than expelled. But if a clot, placenta or fœtus is partly in and partly out—extruding—then Ergot will expel. This is an important fact to bear in mind.

Some interesting experiments have lately been made by Drs. Fowler and Herman, of London, relating to the influence of Ergot in involution of the uterus after labor. Sixty-eight patients were given a single dose of Ergot after labor (30 gtt. fl. ext.). Fifty-eight were given 15 gtt. three times a day for fourteen days after labor. They found that, in the cases treated by the continued administration of Ergot, the uterus diminished in size more rapidly than in those in which one dose only was given. No perceptible diminution in the amount of lochia was observed.

Dr. Bexall reported one hundred patients treated by Ergot. He reports that the routine use of Ergot (15 drops three times a day for three days) exerted no appreciable effect on the date at which the lochia ceased, but that it tends to prevent the formation of clots, hastens their expulsion, and diminishes the frequency, duration and intensity of the after-pains. Dr. Dahin reported a series of careful experiments, but they did not present as good a showing for Ergot. Out of one hundred and three cases where only one dose of Ergot was given directly after labor, sixty-four had after-pains, and fourteen passed clots. When Ergot was given for three days, fifty-one cases out of ninety had after-pains, and twenty-two passed clots. So that these cases had fewer after-pains, but passed more clots. The first series of cases passed clots up to the tenth day; the second series passed no clots after the sixth day.

It seems by this that the continuous use of Ergot, by keeping up a chronic state of contractions instead of allowing normal alternate contraction and relaxation, would tend to favor retention of clots, and prevent the normal process of involution.

In discussing this report, Dr. Herman said that Dr. Fowler's better results were due to the fact that he kept up the use of Ergot

for fourteen days instead of three. There may be some benefit from the continuous use of Ergot for the longer period. But I believe we should select our cases. In primiparæ the use of Ergot for three days would do better than in multiparæ, for after first labors there are no after-pains, and the uterus normally contracts CONTINUOUSLY, while in multiparæ the contractions are intermittent.

In the latter the use of some other remedy, Caulophyllum, or Phoradendron, would be more scientific. This has been my experience, and I am surprised that no mention is made of this fact by the above experimenters. Healthy primiparæ rarely suffer from subinvolution; they only get it when they have had some uterine disorder for years before their confinement. In post-menstrual subinvolution I consider Ergot very valuable, but it must be indicated by its physiological action. The cases which call for Ergot are those in which the menses are too profuse and too frequent, or regular but too long lasting. The menorrhagia is kept up by a paresis of the muscular structures of the uterus, but the uterus is not as a whole engorged; on the contrary it is pale and flabby, soft and enlarged.

In these cases the Ergot should be commenced on the fifth day of the flow, and used for a week in doses of 5 to 10 gtt. of the fluid extract, or "Normal liquid." The object is to secure a continuous contraction. If the whole uterus is congested, I prefer Sabina or Hamamelis if it is venous; and Cinnamon or Hydrastis if it is arterial. If the menses are scanty and pale, Conium, Sepia, or Graphitis are better indicated.

USTILAGO MAIDIS. "Corn-smut," while possessing general properties similar to "rye-smut" or SECALE, differs in one important respect. Its action on the spinal cord, vascular system and skin is essentially the same as Secale, but its action on the uterus is not. Ustilago causes REGULAR INTERMITTENT contractions of the uterus, instead of THE CONTINUOUS CONTRACTION characteristic of Ergot. A large amount of testimony in support of this assertion has been reported from all schools of practice. Were it not for this we might well doubt if there was such a difference in the two Ergots. Ustilago then will be indicated just when Secale is not; namely, in multiparæ where we do not desire to cause tonic contraction of the uterus after labor, and where we wish to imitate closely nature's processes.

Those who have used it in obstetric practice prefer it to Ergot,

for it does not cause hour-glass contraction, or endanger the life of the child, when given just before the completion of labor. Nor does it leave the uterus in a relaxed condition, with a tendency to hemorrhage.

In most cases of subinvolution, especially in multiparæ, or women with very profuse and frequent menstruation, it is superior to Ergot. It resembles Caulophyllum in this one characteristic of regular intermitting uterine contractions. I usually give a full dose, half a drachm of a good fluid extract, just as the head is escaping from the vulva. It acts in 30 or 35 minutes very uniformly and expels the placenta in due time. When I desire to prevent subinvolution 15 drops are prescribed 4 times a day for a week or ten days after confinement. I have never carefully noted the effect of this treatment on the DURATION of the lochia, but I have observed that it was less in quantity and freer from clots than in cases where no medicine was given. Some physicians have reported that Ustilago failed as an oxytocic in their hands. This was probably owing to the preparation used. A simple alcoholic tincture does not represent the whole power of the drug. A fluid extract is better. If the fungus is collected just as the spores are ripe, and used in a dry state, the results will be good. If the ripe spores are triturated with sugar of milk, the first decimal trituration will be active, but it must be kept dry and closely corked. Of this preparation 20 to 40 grains at a dose is sufficient in cases of subinvolution or menorrhagia.

PHORADENDRON is the name given by botanists to the American mistletoe. It is nearly identical with the viscum album or English mistletoe. The latter has long been used in England and on the Continent by midwives and veterinary surgeons, for retention of the placenta, and uterine hemorrhage. It has recently been taken up by regular physicians, especially in Germany, and used as an accelerator of labor, in uterine hemorrhage and menorrhagia. In the Southern States the mistletoe has a medical history of similar uses. Dr. Long, of Louisville, Ky., was the first to bring it into regular practice. A notice of its uses in labor will be found in the last edition of my New Remedies. Since that time there has appeared in all schools some considerable clinical experience, which goes to show that it acts in a manner similar to Ustilago and Gossypium. All observers agree that when given in labor, for deficient or absent pains, it causes intermittent uterine contractions simulating the normal; that

in retention of the placenta it aids in expelling it; that in undue hemorrhage or profuse lochia it restrains it. I do not know of any record of its use in preventing subinvolution. My own unpublished experience is limited to two cases. One case of miscarriage, at the fourth month, in a multiparæ. Her uterus was very large and flabby. After removing the contents, there continued to be considerable hemorrhage of a passive nature. The cavity of the uterus measured four and a half inches five days after. Under the use of Phoradendron in 10-drop doses every four hours for two weeks, the uterus measured 3 inches and all discharge had ceased. The other case was a woman after her sixth confinement. A week after confinement the uterus was readily felt, reaching half way to the umbilicus. It felt heavy and was very open, with a profuse bloody mucous discharge. Sabina and Ergot had seemed inefficient. After two weeks use of the Mistletoe, 15 drops every four hours, the uterus was reduced to nearly its normal size and all discharge had ceased. I believe this remedy is worthy a more extended and careful trial.

Hydrastis Canadensis, an indigenous medicine, has been long known in this country as a tonic, and an alterative to mucous membranes. It was shown by Rutherford to have some action on the liver, and was classed by eclectics as a "Uterine tonic," but no tangible proof was shown that it had any specific action on the uterus, until the German Professor, Schatz, demonstrated that it had the power of contracting the bloodvessels of that organ. He found that in animals it also caused contractions of the uterine muscles, and supposed that it acted similarly on the uterus of women; but later investigations by Schatz and others have shown that it does not contract the human uterus. This narrows down the sphere of action of Hydrastis. In this it differs from all other drugs having an action on the uterus. It is believed to act on the arterioles and arterial capillaries, similarly to the action of Hamamelis on the veins. The brilliant success of Hydrastis in the treatment of uterine fibroids and other uterine neoplasms, is due to the power which it possesses of shutting off the nutrition supplied by the arteries. I do not think its action on the arteries of the uterus is local only. It doubtless acts similarly on all the arteries, but especially on those of mucous membranes, on the liver, mammary glands, and intestines. It may possibly act similarly on the bloodvessels of the lungs and brain. Much has yet to be learned concerning the physiological action of

this unique remedy. It is known to gynæcologists and obstetricians, that a contracted uterus may bleed profusely, and that a uterus may be the seat of violent contractions and yet fail to gain normal involution. Muscular contraction of the uterus may occur without real contraction of its bloodvessels. In a large proportion of cases of subinvolution, uterine hemorrhages, dysmenorrhœa and even amenorrhœa, the trouble may be caused by a paretic condition of the uterine bloodvessels alone. It is in such cases that Hydrastis is the specific remedy. A uterus may be congested with blood to such an extent as to cause either of the above-named conditions. It is not an ACTIVE congestion, but a blood-stasis, in which the coats of the arteries are relaxed and paretic. I believe this condition to be SECONDARY, because in the experiments with Hydrastis made by European observers, it has been observed that the primary effect of large toxic doses was active congestion followed later by arterial relaxation—also that from small doses arterial contraction primarily occurred. In accordance with the law of SIMILIA, minute doses are only indicated in anæmia of organs and tissues, while material doses are called for by the opposite condition.

The distinctive pathological state of the uterus in subinvolution is passive stasis. The arteries are surcharged with blood which is not sufficiently taken up by the veins. This causes an abnormal growth of connective tissue and, if not arrested, induces areolar hyperplasia.

Now, if after menstruation, miscarriage, or labor, the uterus remains large, heavy, and engorged, notwithstanding the presence of muscular contractions with or without pain, then is Hydrastis fully indicated. Its use should be commenced as soon as we detect the abnormal condition, or sooner, if we know that subinvolution or chronic blood-stasis has previously existed. It has been established by numerous observations based on clinical experience that the efficient dose is from 20 to 40 drops of a mother-tincture, or fluid extract, repeated thrice in twenty-four hours, or if the active principles of Hydrastis are used, a proportional dose. Schatz and others find that the Phosphate of Hydrastis possesses similar properties. (By Hydrastis is meant the combined Berberine and Hydrastis.) The dose of this preparation is from one to three grains.

If the white alkaloid is used (Muriate of Hydrastia) the dose is from $\frac{1}{10}$ to $\frac{1}{4}$ grain, three or four times daily. This latter prepara-

tion is now made in a colorless solution—the dose of which is from 10 to 30 drops. It is devoid of any unpleasant, bitter taste, and is tolerated by the most irritable stomach.

One great superiority possessed by this medicine over all others I have mentioned is its tonic and restorative properties. It aids digestion and assimilation of food, increases the tone of the muscular system, regulates the bowels and the secretions. I believe it is indicated in the majority of cases of uterine subinvolution.

CAULOPHYLLUM has been extensively used in this country as a partus-accelerator. It seems to cause uterine expulsive pains closely simulating labor pains.

But there is no recorded testimony that it causes PAINFUL contractions. On the contrary it is a very popular remedy for uterine pains of a crampy or spasmodic nature, and has been successfully used for dysmenorrhœa, painful labors, false pains preceding labor, and after-pains. It would seem that this drug causes in large doses uterine contraction destitute of pain. I have even used it successfully in allaying the uterine pains caused by Ergot. The testimony in favor of its power of preventing very painful labors is sufficient to make us believe it. This medicine ought to be an excellent remedy not only to prevent subinvolution, but in its treatment, when existing. I cannot find any report of cases proving this assertion, but in several cases when I have given it before and after confinement I believe it has prevented excessive lochia, and shortened the period of involution. These patients already had enlargement of the uterus from subinvolution after previous labors. The enlargement seemed to be less after its use. I would not advise the use of the tincture, for it is nauseous and acrid, even in small doses. The attenuations are useless in such cases. Caulophyllum can be given in triturations. The $\frac{1}{10}$th (1x) or 2x is sometimes quite efficient, or it can be prescribed in sugar-coated granules of fractions of a grain, three or four times a day.

LEONTIN, the recently discovered glucoside of Caulophyllum, is a very superior and elegant preparation. It was introduced into medicine by the chemists J. U. and G. C. Lloyd, of Cincinnati. It is about eight times as potent as Caulophyllum, and the 2x or 3x triturations are very effective.

"Lloyd's Solution of Leontin" is about the same strength as the first centesimal trituration. The dose is 5 to 15 drops three or four

times a day. It has been tried by many gynæcologists and obstetricians and found to equal Ergot in causing expulsive contractions of the uterus, but causes no pain (perfectly normal labor-pains are slight when compared with abnormal pains). It has proved useful in chronic passive hemorrhages from the uterus, menorrhagia, too frequent and profuse menses and amenorrhœa.

GOSSYPIUM.—It is a little singular that so much has been asserted of the abortifacient and parturient powers of the cotton root, and yet so little really known. No systematic experiments have been made to ascertain if it will cause uterine contractions in the unimpregnated or gravid uterus in animals or women.

All that we know of it is purely empirical, except a fragmentary proving by the late Dr. Williamson, of our school, and in that proving the uterine symptoms are almost NIL. It is asserted that it will hasten labor by causing more efficient pain, and arrest uterine hemorrhage due to laxity of its tissues; that the expulsive efforts are not as painful as those of Ergot, and that it will arrest excessive lochia.

Now, if it will do all this it will be an addition to our means of treating subinvolution of the uterus. All that I personally know of Gossypium is—that in large doses it rather decreases than increases the menstrual flow—that it is beneficial in after-pains, with normal or abnormal lochia, and that the uterus seems to contract better after labor if it is administered in moderate doses (15 or 20 grains) three or four times a day for a few weeks after labor.

I never found it to cause uterine pain, nor do I know of a single authenticated case where it has caused miscarriage or premature labor. We must have more definite knowledge of its power before we can use it with precision.

SABINA has from the earliest times in medicine been considered a potent uterine drug. There is no doubt that it will cause abortion at any date of pregnancy if toxic doses are given, but at the same time it is one of the most injurious drugs known if prescribed in such toxic doses.

It is pretty well established that it causes active arterial congestion of the uterus (primarily), and passive venous stasis (secondarily). During its primary effects very painful uterine contractions occur, often attended by acute inflammation. During its secondary effects,

the uterine bloodvessels are in a state of atony, and the uterus is enlarged, a pathological condition closely simulating some cases of subinvolution, especially those which are post-menstrual or obtain after abortions. It is therefore better indicated in these than in post-parturient cases. The curative dose lies in the 1x or 2x dilutions.

There are several drugs analogous to Sabina—both botanically and pathogenetically. Among these are THUJA, TEREBINTH, PINUS CANADENSIS and ABIES. Under certain circumstances each may be indicated in subinvolution. TURPENTINE is far more valuable in such cases than is supposed, and THUJA, if indicated, is as potent in preventing and treating this condition as any drug in the whole materia medica.

CINNAMON is another drug which is not sufficiently appreciated. It ranks with HAMAMELIS. But the former is to arterial hemorrhage what the latter is to venous, while HYDRASTIS stands midway between. These three form a trio which we cannot do without. They do not cause contractions of the uterine muscles, only the coats of the uterine arteries. Perhaps Kali bromatum, Erigeron, Trillium, and Millefoil belong to the same class; I think they do. In conclusion I have a few words to say regarding the doses I have advised. Not in the way of an apology but in explanation.

Uterine subinvolution is never a primary affection. The primary condition which precedes it is always active congestion. Now, none of the medicines above treated can cause PRIMARILY subinvolution, but they all cause, in large toxic doses, the active uterine congestion or inflammation which ends in chronic vascular stasis with hyperplasia of tissues.

The deduction is, that all the drugs recommended above are secondarily indicated in that condition, and the dose MUST be larger than if they were primarily indicated. Were I considering acute congestion or inflammation of the uterus, I would advise minute doses of the same drugs with a sincere belief, based on experience, that such doses are curative. In prescribing material doses of medicines for symptoms and conditions, which simulate their secondary effects, we expect to set up physiological effects which to a certain degree resemble the primary acute symptoms. I have often been astonished at the practice of otherwise practical men, who believe it possible to set up

physiological effects with infinitesimal doses. I have known physicians prescribe Secale 30th for the purpose of causing uterine contractions in hemorrhage, or absent labor-pains. As well might we prescribe Ipecac 30th to CAUSE emesis.

Until such utterly absurd notions are abandoned, we cannot expect anything but ridicule from scientific men of all schools, for the foundation of all science is fact. The law of SIMILIA is a grand therapeutic law, but we must not misunderstand or pervert it, if we desire it to keep its place in the art of healing.

SUBINVOLUTION OF THE UTERUS.—SYMPTOMATIC INDICATIONS FOR REMEDIES.

By B. F. Betts, M.D., Philadelphia, Pa.

Very often the most prominent symptoms produced by uterine subinvolution are those referable to the mental sphere: the gastric and pelvic symptoms being next in importance, but so meagre as to attract but little attention.

On the other hand, we know what a powerful influence mental emotions have in retarding the process of involution after parturition, just as functional action is disturbed in other organs, as the stomach for instance, when impaired digestion occurs in consequence of the mind having been impressed by either joyful or painful emotions.

In the selection of a remedy for subinvolution, we will therefore find the mental symptoms often the most important guides to enable us to choose between those drugs having pelvic symptoms so similar as to leave us without any other means of differentiation.

To secure perfect involution, after abortion, parturition, or even menstruation, certain precautions have to be observed. When the parturient passage has been lacerated it must be repaired, and when placental tufts remain after parturition well-directed efforts should be made to remove them. Disturbances of the circulation must be avoided in all cases, whether from chilling or emotional influences.

After parturition the physician can never be sure of having secured to his patient the most favorable conditions for her future good health and comfort until he has satisfied himself that the uterus is involuted. He should therefore examine each case before it is discharged from his care and supervision, about the fifth or sixth week subsequent to parturition, and if displacements exist, or pelvic inflammation and hyperplasia of the uterus have supervened upon some injury, treatment should be instituted until health is restored. For such treatment, experience has demonstrated the fact that vaginal

examinations should not be made earlier than the time mentioned above, unless urgently called for, and that pessaries should be dispensed with until all other methods by postural treatment, and the application of cotton tampons, have proved inefficient as supports for the dislocated organ.

The condition of the patient's skin, bowels and all of the emunctories has to be considered, and whenever our efforts seem to be less productive of good than we had reason to hope for, the application of electricity will prove a valuable aid in bringing about a more rapid metamorphosis of tissue, as was explained in a paper I had the honor of reading before this Bureau at our last meeting, since which time the method has gained many warm friends from amongst the foremost gynecologists of this country and Europe, who have watched with interest the results obtained by Apostali in this field of labor.

But we will not feel that we need to rely upon this as the only method of treatment. In a majority of cases our homœopathic remedies will yield such results, from careful application, as to leave but little to be desired.

Homœopathic Therapeutics.

Actea racemosa.—The patient is nervous and restless and greatly depressed in spirits, unable to sleep at night. Cannot decide the simplest question without questioning her judgment. Fears she will lose her mind. Complains of pains over eyes extending along the base of the skull to occiput, or pain in the vertex from within outward, as if the top of the head would be lifted off.

Tenderness in the uterine region and shooting pain in the region of the ovaries, either across the lower part of the abdomen or going up towards the chest. Infra-mammary pains of uterine origin.

Alumina is indicated in chlorotic women who have morbid appetites, and such an inactive condition of the bowels as seldom requires them to attempt an evacuation. They go for days without stool. Sleep is restless and they awaken with anxious palpitation of the heart.

Leucorrhœa is copious and albuminous. It excoriates the vulva, and is worse before and after the menses, which in time leaves them exhausted in body and mind. The menstrual flow is scanty but quite painful at times, and the discharge is often pale and watery.

Ammonium muriaticum has been mentioned in connection with uterine hyperplasia. A prominent indication is a tensive pain in one or the other groin, described as a strained feeling, which forces the patient to walk bent. Fat, bloated, indolent women are its best subjects.

Anathecum muriaticum.—Burning, cramping, gnawing pain in the uterine region with debility and general prostration. Lancinating distensive pains in the uterus. Burning pain in the uterus extending to the region of the kidney, with great weakness.

Argentum metallicum.—A pain in the region of the left ovary, without much sensitiveness of the integument externally, with descent of the enlarged uterus, is quite characteristic of this remedy. This pain is also felt in the back and extends to the front and downward.

Arg. nit.—We think of this remedy when there is weakness, almost paralysis of the lower limbs, associated with rigidity and pain in the muscles of the legs below the knees, and such gastric disturbances as are marked by frequent loud eructations, with despondency. Weak memory in thin, dried-up women who are impulsive, excitable, nervous, irritable and anxious.

Aurum is indicated when the characteristic mental symptoms are present, and in sanguine, light-haired, nervous women tainted with mercury or syphilis. There is burning in the vaginal passage and sensitiveness. Sterility. Menses delayed and scanty. Bruised, shooting or drawing pains in the uterus. Aurum muriaticum natronatum is the preparation preferred by some, and from it good results have been obtained in the treatment of all forms of uterine hyperplasia.

Bellad.—When acute symptoms predominate, with backache as if broken, or pain *through* the pelvis, numbness in the legs, soreness or throbbing in the uterus. Pain > when sitting erect or standing, < when bending over or walking. Spasmodic clutching pains in the region of the uterus. Pelvic bearing down with profuse menses. Pains come on suddenly and cease as suddenly as they came; pains run through the pelvis.

Bromine will prove of service when there is vertigo, made worse from persons passing in a hurry or increased by any passing object, such as running water or a moving vehicle. Accompanying this vertigo, associated with the subinvolution, there is an anxious state

of mind developed as if they were in the midst of impending danger, as if some one was going to step out from behind them. With the vertigo there is often a feeling as if they would lose their senses all at once; and in one case cured, the patient fell to the floor upon two or three occasions and lost consciousness for a moment or two. After Bromine 3d, these symptoms disappeared and the uterus became smaller. Women with light hair, blue eyes and fair skin and those with affections of the throat and chest, are good subjects.

Calcarea and its Salts.—When the proper proportion between the adipose and muscular tissues of the body is not maintained, or when the osseous system is imperfectly developed, we may find the Calcareas called for. The symptomatic indications for the ostrearum are as follows: Apprehensive state of mind; fear of loss of reason or that persons will observe her and suppose her to be crazy. Unable to sleep after 3 A.M. Vertigo on going up stairs. Cold, damp feet at night, or partial sweats on other portions of the body. Menses too frequent and profuse. Every little exertion or mental emotion causes a return of the flow. Whilst the fat and flabby scrofulous patient will require the ostrearum, the

Calc. phos. will be preferred in slender, narrow chested or phthisical patients,

And the *Sulphurica* in cases complicated by purulent infiltration of the pari-metric tissues rather than by true abscess cavities with pyogenic membranes lining them. When such pus-bags have existed for a long time, interfering with pelvic circulation and contaminating the whole system by their presence, the Calc. sulph. will prove sufficient to remove the accumulation and reduce the hyperplasia in the uterine tissue.

Calc. iod. will be indicated in cases complicated by glandular enlargement.

Caulophyllum.—Weak, nervous, languid patients. Aching and dragging in the small of the back. After abortions or rapid labors uterus enlarged and menses irregular and changed in character. Sanguine, rheumatic women, weak and nervous, hence they desire to remain quiet. Sensation of fulness in the head. Uterus congested, with fulness and tightness in the hypogastric region, or severe spasmodic pains in the uterus followed by leucorrhœa or a menstrual flow. The leucorrhœa is acrid and seems to weaken the patient, and is attended with drawing pains in the lower extremities.

China offic.—Weak, delicate women who perspire easily and are very sensitive to draughts of air or chilling influences. Menses too early and profuse, at which time they may complain of vertigo and ringing noises in the ears or faintness.

Convallaria majalis removes tenderness and soreness in the hypogastric region as well as the aching which is an attendant in some cases of subinvolution of recent origin. The soreness is continuous and worse from motion; even breathing aggravates, as does coughing or laughing (Bry.). Bearing-down pains at intervals, like labor pains, in the abdomen and in the lumbar region. Pains in the pelvic region are aggravated from motion, sitting up straight or leaning back; ameliorated by bending forward when sitting (Bell. opposite).

Iodine preparations.—Leaving out of consideration the pathological indications, we may say that all the iodine preparations have the nervous irritability of the halogens; the combination with arsenic and Iron gives us the most physical and muscular weakness.

The *Iodide of arsenic* gives us the greatest mind prostration, with the hard indurated glands and other evidences of the Iodine scrofulosis. The burning pains and acrid discharges from the pelvic organs will lead us to select this preparation. The impoverishment of the tissues arises from poor digestion, loss of appetite as well as imperfect assimilation. The blood is disorganized; the complexion sallow.

The *Iodide of iron* gives us more bearing-down pain, as if the uterus reached the vulva and was pressed up when the patient seats herself. The albuminous discharge from the vagina, the bloated feeling after eating and the mental and muscular weakness reminds us of Hydrastis, but the Iron in combination gives us more of the disturbed circulation, flushing of the face, burning of the cheeks, etc. When these symptoms are met with in scrofulous women suffering from subinvolution of the uterus, Ferr. jod. in 6 can be prescribed with confidence. The anæmia arises from such a disturbance in the hæmatogenic function as results in a diminution in the number of red blood cells in the blood; the complexion is pale, not sallow.

Iodide of potassium.—Kali iodatum is the remedy upon which reliance is placed by the allopathic fraternity. It is given to hasten tissue metamorphosis and the absorption of the products of inflammation. We may find it indicated in old chronic cases having a

syphilitic history when there is a tendency to metrorrhagia, dysmenorrhœa, copious leucorrhœa, emaciation and prostration. Before the menses there is frequent desire to urinate as from pressure of the uterus upon the bladder, which disappears when the flow becomes established.

Kali carbonicum.—What the Iodide of potassium is capable of accomplishing in old chronic cases of subinvolution, the Carbonate will accomplish in recent cases if the conditions favoring its action are provided. She dates all her suffering from a not very distant confinement. She is anæmic and fat. Apprehensive, timid and unable to sleep after 3 A.M. She is of lax fibre, as is indicated by the puffy appearance about the eyelids. Atony of muscular tissue. Disposition to be affected by lifting, and over-exerts herself by the slightest efforts. The pains are sticking and stitching in character; also darting < from rest and lying on affected side (Bry. opposite). She suffers from pain like a weight in the back. Stitching pains about the sensitive uterus; labor-like pains in the region of the uterus. Menses too early, too profuse, of an offensive odor; blood acrid. Stomach sensitive, distended; feels as if it would burst, or as if it were full of water. She may tell us that she always has her labor-pains in the thighs—to the knees. The latter is a prominent indication for Kali c.

Lycop. will be indicated in some cases when subinvolution is attended with endometritis and much bloating of the abdomen and rumbling of flatus, especially in the left hypochondriac region, or after repeated pregnancies when the sexual function has been abused and there is weakness of memory, confusion of mind or absent-mindedness, with desire for solitude. Constipation, hepatic derangement; a feeling of dryness in the vagina; pain in the bladder and back before urination, with a deposit of red sediment upon the bottom of the vessel after urine has been standing a short time; also 4 P.M. aggravation.

Mel. cum. sale. was for years a popular remedy in Germany for diseases peculiar to women. Farrington, of Philadelphia, used it for fundal and cervical hyperplasia when there was a feeling of soreness across the hypogastric region, from ilium to ilium. Jeanes. (compare Convallaria maj.).

Mag. mur. is a valuable remedy for nervous women suffering from pains down the arms, between the shoulders and down the back,

with uterine complaints. Bearing down in the uterine region and spasmodic pains in uterus (Cauloph., Actea racemosa). Menses very dark, with pain in back when walking, and thighs when sitting.

Phos.—Tall, graceful, fearful, excitable women frequently need this remedy when the sexual appetite is strong and menses profuse. They complain of a weak, empty, gone sensation felt through the whole abdomen; sensation of heat in the back, between the shoulder-blades; stitches pass upward from the vagina into the uterus.

Nat. muriaticum.—When the menses are scanty and dark. The patient is melancholy, especially at the time of the menses, and impatient. She has a sallow complexion, and complains of dryness in the mouth, or dryness and rawness in the vagina. Constipation; headache in the morning; pain in the rectum during stool. Pelvic tenesmus, with pressure towards the vulva, relieved by sitting down and disappearing upon lying on the back.

Platina.—Menses dark, thick, profuse, and very exhausting in persons suffering from too strong sexual appetite, with painful sensitiveness and continual pressure in the external organs of generation. Haughty women who treat their friends and equals as being inferior to them. In other cases Platina may be of service when there is a melancholy, tearful disposition developed, with the intense sexual excitement.

Secale corn.—Thin, scrawny women, who have had frequent miscarriages or borne children very fast. Whose faces are sallow; skin shrivelled, dry and harsh. Flow of blood from uterus passive, dark, and sometimes fetid.

Sepia.—Venous hyperæmia of the pelvic organs, with pelvic bearing-down pains; stitching pains from the uterus up through the abdomen. Vagina and vulva very sensitive. Bowels constipated; frequent desire for stool; frequent urging to urinate. Complains of headache in the left side of the head; left temple worse in the morning, and often associated with vertigo and nausea.

Staphisagria.—Sharp shooting pains in the pelvis; painful sensitiveness of the sexual organs, especially when sitting. Memory defective; indifferent, low-spirited. Women who have abused the sexual functions by masturbation or too frequent sexual indulgence. They are very sensitive to the least impression, and feel hurt by the least word that seems wrong to them; or when subinvolution can be traced to a mental influence arising from indignation with vexation at the

lying-in period, which she has striven to suppress. She feels very cross and irritable, even maliciously-disposed towards her friends.

Ustilago.—Discharge of blood from the uterus bright red, partly fluid, partly clotted. Passive congestion of the uterus, so that there is a slight oozing of blood after each examination. The tissues of the uterus feel soft and spongy. The os patulous.

Discussion.

N. Schneider, M.D.: The subject assigned to me for discussion is the nutritive disturbances. As the paper upon which I am expected to base my remarks has not been read, I hardly know what to say. However, I will state that without a proper supply of blood and nerve-force, the uterus cannot be properly nourished, hence, cannot have health. It is also necessary that the nutritive fluid be healthy. This brings us to the nutritive disturbances of the uterus, the cause of which may be either systemic or local, more often local. It may consist in a tumor interfering with the blood and nerve-supply, or a displacement of the uterus itself. Either of these causes may produce engorgements, inflammations, and the many pathological conditions which come from disturbed nutrition. The symptoms of engorgement are heaviness, pain in pelvis, back and limbs; soreness when the parts are touched or jarred. Headache and loss of appetite; not much elevation of temperature and not much quickening of the circulation. The pain is sometimes sharp and shooting, at other times dull and heavy—rather a "misery" as the colored people call it. If the parts become inflamed, all the symptoms are more acute, and the general systemic involvement more pronounced. When the condition depends upon local causes, the treatment should be surgical. Tumors should be removed and displacements rectified by proper instruments. Many will recover when such causes of nutritive disturbances are removed, but frequently some of the pathological conditions remain, and we are expected to do more. When the engorgement or *apoplectic* condition exists and persists, local depletion may be necessary, and we shall often be astonished at the benefit which comes from this measure. It aids the circulation in the vessels and gives tone to them. New blood takes the place of used up material, the nutrition is improved.

Local applications of hot water, Glycerine and Iodine, Hydrastis, etc., are adjuvants. But we must not forget the homœopathic remedies which help to restore the nutrition of the part, which dissipate many of the symptoms which give relief from pain and distress, and hasten the restoration of the parts to a normal state. Belladonna in the heavy and clawing pain; Apis in the stinging and

darting; and Magnesia phos. in shooting and cramping; Gelsem. for its characteristics. When pathological conditions incident to nutritive disturbances are not dependent upon local causes, we can relieve them permanently only by the use of the true homœopathic remedy.

E. M. HALE, M.D.: The discussion about remedies for engorgement has reminded me to ask Dr. Gentry to relate his experience with regard to the wonderful effects of Elaterium when applied to an engorged uterus.

W. D. GENTRY, M.D.: I didn't expect to be called upon to make any remarks before you, but I think from what I have heard you may be interested in my little experience. Some years ago in studying the materia medica, and that is my business to-day and will be for all time to come—I came across Elaterium, in Dr. Burt's work, which said that when applied to a mucous surface it produces a profuse flow of serum. I reasoned in this wise: if this is so, why should it not remove the engorgement of the uterus, and I concluded that it would; still I was fearful of using it in its full strength knowing its cathartic properties, so I potentized it by mixing it one-tenth with cocoa butter. I had a case that I had been treating for some time that didn't respond very readily to the application of glycerole, hydrastis and iodine, and I concluded to try it upon that case. I introduced the capsule in the morning. That evening I was sent for to see her. She hadn't been able for the past 6 or 8 hours to micturate on account of an accummulation of a hardened matter that covered the parts. I didn't know what to make of it. I supposed I would find out upon making an examination. I found the meatus urinarius occluded as completely as if Collodion had been applied. Removing that, the flow of urine set in promptly. The next day I called again and removed a wad of hardened serum as large as a hickory nut. To my very great astonishment she felt lighter and better and the next day I made another application. I applied it every three days from that time with satisfactory result, and in one month she was well. I have since used it in my practice for 5 years with the best of results in hundreds of cases. I apply the Elaterium, potentized with cocoa butter, in the *cul-de-sac* and smear it over the cervix and around the walls of the vagina. Direct the patient to wear a napkin to protect the linen, and to use an enema of warm water and castile soap in three or four days. The application should be made once a week between periods. There may be more serum drawn from uterus of some persons than others. The remedy does not act the same in every case. In some women considerable pruritus is produced. In such case I direct the patient to apply Syrup of Tolu to the parts, which gives quick relief. Elaterium may be depended upon by the profession to remove engorgements and I most earnestly recommend it.

W. H. DICKINSON, M.D.: I am informed that the Orange Blos-

som which is sold throughout the country as a proprietary medicine is nothing but elaterium.

THE CHAIRMAN: It is a mixture of elaterium and the jequirity bean. Elaterium is an old-fashioned hydragogue that has been used by the old school in abdominal dropsy, and is now being used by the so-called specialists and quacks and is sold all over the country as Orange Blossom.

DR. HALE: Some of you may have seen that remarkable paper read by Dr. Earle, of Chicago, before the American Association of Gynæcology, relating to watery discharges from the uterus. I had two or three cases which occurred about the same time; one was during pregnancy where about every month there would occur a profuse watery discharge. When I say profuse I mean enormous for the apparent capacity of the uterus, and she was afraid they would cause her to miscarry. The other two cases came between the menstrual periods. The patients would be taken with a profuse watery discharge which would soil as many napkins in one period as she would ordinarily soil in 6 or 7 actual menstrual periods. This was colorless and odorless. It occurred to me, after treating the first case for some time and failing, to try Dr. Gentry's recommendation. So I used Elaterium homœopathically because it has the power of causing enormous serous discharges from the intestinal canal. I reasoned from analogy that if it affected the intestines in that way it might produce serous discharges from the uterus if the provings were carried far enough. I gave the 6th decimal trituration of Elaterin, the active principle, which would be about the 3d decimal of Elaterium in powder. I gave this 3 or 4 times a day. It acted promptly and she has never had any trouble of that kind since. The pregnant woman who had this serous discharge was cured on the 6th month after a week's administration of Elaterium. Now whether these were coincidences I couldn't say, but they look very suspiciously like cures.

DR. HOYT knew of a lady who was pregnant in the 4th month who, on using "Orange Blossom," miscarried.

DR. COMSTOCK: Would Dr. Gentry recommend this preparation in ulcerations of the uterus and erosions and engorgements?

DR. GENTRY: Yes, sir; because it relieves those as quickly as cauterizing or anything else that can be used, and in laceration, it will restore the parts to a normal condition so that the operation can be better performed.

J. C. WOOD, M.D.: In regard to dilatation, I would say, that anything short of a rapid and complete dilatation in my cases, has been exceedingly unsatisfactory. I have only obtained good results by the rapid dilatation method, that is ordinarily known as Goodell's. I have tried the various forms of gradual dilatation, and I have used the stem pessaries, but neither has been very satisfactory to me.

Rapid dilatation is especially applicable in the treatment of anteflexion of the uterus. Congenital cases of anteflexions with resulting sterility have always given me the most trouble, and I frequently dilate to relieve both the sterility and the displacement. I have used the galvanic stem pessary mentioned by Dr. West, but have not used the stem referred to by Dr. Danforth. It is true that a certain increase in the size of the uterus will take place in cases of this kind, but I have seen the same increase take place quite as rapidly and decidedly in cases where the uterine sound had been occasionally introduced, so that I have been led to infer that the increase in the size of the organ following the introduction, is simply due to the application and introduction of a mechanical instrument of some kind. In regard to the therapeutics of uterine congestion, hypertrophy and hyperplasia, I regret exceedingly, that nothing has been said concerning electricity as a therapeutical agent. During the last year I have used galvanism very extensively, in cases of this kind and the results have been eminently gratifying. Concerning the use of Orange Blossom, let me say, that observing in certain instances decidedly favorable results following the application of the "quack" remedy, which we now learn contains no orange blossom, I obtained with no little difficulty an infusion of the genuine blossom and have been, for the last year, experimenting with it. I find it acts very nicely in cases of cervical hyperplasia, where there is a decided increase in the size of the cervix, and instances where I have heretofore used local applications of Iodine. I have also found that the internal administration of "real" Orange Blossom acts very beneficially. As a result of my experience, I have consulted my colleague, Dr. Arndt, concerning the advisability of proving this drug and in due time such a proving will be given to the profession.

I infer from Dr. Runnel's paper that he would have every woman consider motherhood the goal of her existence. But suppose every woman cannot fulfil this mission? I am now speaking from the standpoint of co-education, and can give you my observations in our own University of Michigan.

The women in the University of Michigan, and especially the women in the professional departments, come up to the rack, pass their examinations, and they do just as well, and in many cases they do better than the gentlemen of the class. They fit themselves for a professional life. They are not obliged to marry the first dude that comes along. I think women can enter professional life without injuring themselves either mentally, physically, or morally. And I say we have a practical demonstration of this fact every year in the numerous co-educational institutions of this country.

Sarah N. Smith, M.D.: It was stated in one of the papers read last evening, as I understood it, that mothers were responsible for the evils and misfortunes that come to children; that they were too often

hindrances instead of helps to their children, and that it would be far better if mothers were less intelligent and less educated, and were more ready to bear and rear children; that they should be better educated in their sexual instincts. Perhaps the statement is true; I am not disposed to affirm or deny it; at the same time I think that we should need to go a little further to find the *etiology* of all the evil and weakness that children inherit; we should doubtless find more satisfactory results if *reconstruction* should extend to the *fathers* as well. My observation shows me that it can be traced to both sides of the house. You may thank God and take courage that you have women doctors to educate your young daughters, and that you will yet be compelled to say that it is well that woman entered the profession. You have little idea of the influence that women doctors are called upon to exert over young girls who are not responsible for their ignorance of the laws that should govern them, because they have not been taught the importance of these laws, save in doctors' families; hence much of the trouble that we so often have to contend with in our profession from want of fidelity between husband and wife that nothing can atone for. You, gentlemen, should sustain the women of the profession in this noble work.

I, for one, believe that most cases of uterine trouble can be removed without *local* application. I think they come from general ill health. Restore the health, and you will find that the uterus will improve as the general health improves. I believe that I have as good results as most gynæcologists, and I find that one of the best remedies to help accomplish this is Sepia. I think the trouble often comes from a weak, sluggish circulation of the whole abdominal viscera, and there is no one remedy that does better service in my hands in establishing a healthy portal circulation than Sepia. When you have accomplished that you may expect a speedy cure, and will not be disappointed.

A. R. Wright, M.D.: Dr. Danforth exhibited a pessary here for examination. In the first place I want to premise that I do not believe in the use of pessaries generally, but there do come cases which need them. I differ with Dr. Danforth in regard to the solid pessary as compared with the hollow stem. I have always used the solid pessary, and have never found any difficulty in leaving it in position during the menstrual period, or during the time of catarrhal discharges. The discharges come away just as readily, if not better, than with the hollow stem. When properly indicated I have always found the solid stem to be worn with comfort and perfect safety, sometimes for a period of six months. I think the tube construction necessitates too large a size for the ordinary cervix.

L. C. Grosvenor, M.D.: A word as to preventive treatment. We are constantly called upon to treat metritis, endometritis, cervicitis, endocervicitis, retroversion, anteversion, retroflexion, anteflexion, pro-

lapsus, ovaralgias, leucorrhœas, and a long list of diseases which keep the doctors busy and the husbands poor. The good physician, in looking for a cause for these abnormal conditions, finds pelvic congestions in the front rank. From the time a lady is fifteen till she is forty-five she is doing one of four things—menstruating every twenty-eight days, gestating, lying-in, or lactating; each of which either directly or indirectly causes congestion to the pelvic organs.

Our boy and girl grow up side by side, wonderfully similar in form and tastes till the development period, when the boy's shoulders grow broader, his hips knit firmly together, he takes pride in his brawny muscles, and wants you to crack a nut upon his well-developed biceps.

The girl, on the other hand, grows coy, shy, and sensitive. Her breasts develop, her hips broaden, and her habits of life are more sedentary, and custom deprives her of the healthy out-of-door sports which her brother enjoys. About this time she is seized with the corset craze and the passion for a high-heeled shoe, and she forgets that neither of these will help her to develop a rare personal beauty like that she so much admires in our galleries of fine art. Her dress during this important period should be eminently benign and comfortable, and beautiful in its simplicity. Her under-vest and drawers should constitute one garment, hanging from the shoulders. The chemise and drawers also in a combination suit. The skirts should be cut princess or Gabriel, and hang from shoulders, and with skirts bifurcated—if you will "a la Janess Miller—and the dress also should be in princess pattern. All should be made of light, fluffy, attractive material, so that she shall feel that she is beautifully, not grotesquely, dressed. The mammæ should receive especial attention, and be allowed to develop without pressure, thus avoiding those later fraudulent conditions of motherhood, imperfect powers of lactation and countersunk nipples. A little attention to these matters during this important period will conserve her health and beauty and prolong her *more* useful life.

N. Schneider, M.D.: In regard to this pessary, as I understand Dr. Danforth, it is not used for flexions. It is not worn after the patient gets up from the bed. There is an application that can be made to the cervix for dilatation and one that has not been used a great while, that is the slippery elm bougie or tent, in place of the stem pessary that he speaks of. It does not require that rapid dilatation, if you get one small enough. It is placed directly into the cervix and it expands to such a degree that when it is removed it is twice as large as when introduced. You can then follow it up with different sizes and at the same time that you get the dilatation you get the pleasant effects of the slippery elm. There is a statement that should not be put on record without a challenge, namely that all uterine displacements can be cured by constitutional treatment alone.

I want to challenge that because I don't believe it is true. Flexion of the uterus, especially when it has remained until it produces pathological lesions incident to chronic flexions, cannot be cured with internal medicine alone. I don't believe there are many in this house that will say they can be cured by constitutional treatment alone. Lacerations can never be cured or healed if they have once cicatrized over. They can only be restored by an operation.

J. C. MORGAN, M.D.: I coincide with the remarks made by Dr. Grosvenor concerning dress, and would state that in my own family no such thing is known as these fashionable diseases. As to drug treatment, I was profoundly impressed by Dr. Guernsey's treatment of an obstinate case of membranous dysmenorrhœa wherein one of our gynæcologists proposed to sew up a lacerated cervix and perineum. Instead, I said, let us go and see Dr. Guernsey, and hear what he has to say. He prescribed on homœopathic principles, dry powders of Kali carb. very high, four doses at intervals of three nights, and Sac. lac. between. He said this was for subinvolution of the uterus, and that was the fundamental idea with him then, in prescribing. At the end of three or four weeks I again took the patient to Dr. Guernsey: the subinvolution of the uterus had disappeared from his vision. He was now fishing around for something else; he found out that this lady had some pruritus in different parts of the body and some outward pressing pains in the sacrum. He gave Berberis vulgaris 45m. at the same intervals. After taking these four doses the patient was almost convalescent, but he elicited the symptom "the lower abdomen feels as if it would fall out." Belladonna very high was given in like manner. And now health came apace. Dr. Guernsey's last illness precluded another interview; but I easily finished the cure with *Lachesis*, high, at like intervals. The menopause had now a fair chance to take place. (She was about fifty years of age), and she remains well.

DR. PHILLIPS: I believe that a large proportion of the diseases of women that we are called upon to treat have their rise to some extent in imperfect dress as has already been claimed by former speakers. But that is only one of the matters to be considered. Another and perhaps as important a one if not still more important, is the overstrain of the nervous system in education, in social life and in every other way; and without attention to these the diseases which are produced by them will continue to exist and give plenty of business to the gynæcologists. There was in one of the papers (I think it was Dr. Hale's), a statement that of all the remedies that had been applied to the relief of tumors of the uterus, Ergot had the best record. That differs very greatly from my experience. I have cured 28 cases of fibroid tumors of the uterus varying in size from a hickory nut to an infant's head, with iodide of lime continued for a long time, perhaps, in a solution of 15 or 20 grains to the pint of water (which would

give us about the 2d or 3d decimal dilution), one tablespoonful after each meal for from three to twenty months and this has invariably cured those cases. If you can beat that record with Ergot I want to know it. I mean this for internal use only. I will say that I do at the same time apply for relief the glycerole of belladonna which by the removal of serum relieves the pressure and engorgement. I have found the iodide of lime, in all cases that I have observed, to decrease the tendency to hemorrhage without exception.

ALBERT CLAYPOOL, M.D.: I regard the use of hot water in some of these uterine troubles mentioned by Dr. Schneider, as indispensable. I believe the great majority of you will acknowledge that it is at least of great benefit. But many of you have had cases that not only failed to receive benefit but were injured by the use of hot water. I believe that where injury results from its use it is caused by the long application of moisture and not from the heat. I have demonstrated that other diseased pelvic organs can be benefited by the use of hot water wherever the heat can be applied as *dry* heat, direct, or contiguous—to the organ or part involved. For over two years I have been investigating and experimenting with this phase of the hot water treatment. I first used the rubber bag of a Barnes's dilator by carrying through the connecting tube a double channel catheter, to which I attached the necessary tubing to carry in and out the water used. Latterly I have, for use in the vagina, taken a double channelled catheter and fitted a small cork around it near the point, just above both openings, and then over that, covering the point of the catheter, have stretched the neck of a rubber bag taken from a toy whistle. It makes a very servicable instrument if not a very beautiful one. For use in the cervix, uterus, urethra, bladder or rectum, I prepare a double channel silver catheter in the following manner; *i.e.*, cut off the point of the instrument, just above the fenestra or opening, cut away the end of the septum and cap the instrument with the point of the severed fragment. Now insulate the instrument by drawing over it a piece of rubber tubing, leaving just as much of the point bare as you want to furnish heat to the affected parts. Attach to the bifurcated ends the tubing to carry the water to and from, and the instrument is ready for use.

Last year at the Saratoga meeting, in the discussion of the paper on the use of hot water, I called attention to a plan I had been investigating, for the use of hot water without allowing the water to touch the affected parts, stating that it benefited those cases where heat was desirable but where moisture was apt to do harm, etc. My object in calling attention to this phase of the hot water treatment at that time was with the hope that others would give it some inquiry and the sooner learn whether there was any good in it or not. In continuing the work during the past year I am glad to say that the results have been much more encouraging than I expected. It can

be used successfully in many diseased conditions in which the ordinary way of using hot water is impracticable. Its use is not confined to the vagina and the vaginal portion of the cervix uteri, but it can be carried into the cervical canal, the cavity of the uterus, the urethra, the bladder and the rectum. It is applicable to chronic inflammations, engorgements and subinvolution of the uterus, also in urethritis, cystitis, and proctitis. Carried high up in the rectum it will do much toward relieving inflammation, congestion or neuralgia of the ovaries.

Dr. Philip Porter has devised, and had made, some instruments for the application of hot water in the manner described which are well adapted to the purpose. These instruments are very ingenious and useful, and will aid very much in determining the real value of this plan of using hot water. Dr. Porter will have something to say on this subject that will interest all of you.

O. S. Runnels, M.D.: I think I will have to defend myself a little against the ruling of the Chair and the general impression prevailing amongst some of the members that my paper on preventive therapeutics is out of order. If he had called for papers on medicinal therapeutics, or if we had understood that this discussion was to be restricted to the administration of medicine alone, then I should have confined my paper to that branch of the subject, but as I understood it, the general therapeutics of uterine maladies was under consideration and that brings up the use of remedies other than medicinal agents. You have not been long in the practice of gynæcology if you have not found out that it is many-sided art and that many things must come to your aid if you are going to cure your patients. I have great admiration for the sublime faith of some of our brethren in the use of medicines alone; but I say they have not gone far enough—they have not had experience large enough in the treatment of all forms of troubles of this sort if they haven't found out that they must resort frequently to other things as adjuvants. The Lord did not intend that we should have such a set of physical weaknesses to contend with as we have among women. Here are a great many things that have been operating to produce these results and I tried to point out to you, in the paper, how it came about—that we had, underlying and preceding all, *errors of development*, so that we have dwarfs to contend with; so that people come to the work of life in no kind of preparation for it; so that the very effort to do the physical labor required of them must of necessity be a failure. Now I tried to lead to this, and I am very sorry that I have been misunderstood. I had no thought of attacking our noble brethren of the other sex and I honor all the ladies who are helping us to heal these people. I ask them to take that paper and read it and see how far, if at all, I am astray. There are many things of this sort that lay at the very foundation of uterine therapeutics. That is where your therapeutics must commence.

If you follow the idea which I have sought to bring before you, that is, educate the girls in the matters pertaining to their health, dress, etc., then you will not have any trouble with stenoses and congestions and all these other troubles that we have heard about this afternoon. In regard to the use of stems my experience has been that complete rapid dilatation followed by the wearing of the uterine stem is the best method. In regard to those cases of sterility that are due to flexion that are utterly irremediable by other means, I use a stem devised by Dr. Gill Wiley, of New York. This has a slot down the outside of the stem so that it can be worn with great ease and readiness—the discharges escaping freely. These stems are worn with the head of the stem resting in a cup pessary and can be retained for three weeks or longer. Of course while it is being worn the patient should be quiescent.

DR. MORGAN: On this subject I have something to offer. The application of moist heat may be facilitated in several ways. Dr. Alice B. Stockham, of Chicago, recommends enclosing wet flannels between the leaves of a newspaper, and laying this until it steams on top of a hot range and then uses relays of this for application to her patients. Another way is to half fill an ordinary hot water bottle and lay a dampened double flannel upon that and apply. A third way, which is exceedingly handy where stoves are used, is by means of a heated flat-iron applied to the folded wet flannel, ironing it until hot. A gas stove, or oil stove, or any similar device answers as well at the bedside. Dry heat may be derived from heated bran-bags, sand-bags, or pieces of boards wrapped up in flannel; or flannel alone. In regard to medication, of course it will be proper first to correct mechanical errors so far as may be. Constitutional treatment is then likely to be effective. I think we ought to reduce the mechanical obstruction first to the minimum, if we can, then give the indicated remedy for the after-symptoms; still, cures are made by drugs alone, no doubt. I divide medicines for such purposes into groups. The first group I will call "Dynamic," influencing the forces of the nervous and circulatory systems, principally acting upon the nerves that go to the bloodvessels and to the muscular supports of the uterus and its appendages. Of these a good type is Gelsemium, that great controller of vascularity and muscularity. Another group is that which affects the abdominal and hepatic venous circulation, and is represented by Sepia, as it controls the portal system. Of the uterine and associated tissues, we may well remember the mucous, the muscular, the serous; finding these drug types, respectively, in *Ipecacuanha*, *Cimicifuga* and *Bryonia*. Besides these tissues there is yet another associated with and affecting, as well as affected by, all the rest, viz: the connective tissue. Here, too, is the specific location of "hyperplasia." The metals, as Plumbum and Aurum, are typical here. Plumbum agrees specifically with interstitial nephritis, and interstitial metritis is comparable with it.

SUSAN A. EDSON, M.D.: If we wish to bring about a reform in dress and lessen the gynæcologist's work we must begin early and teach our children their own history by giving them anatomy and physiology purely,—that their origin is never to be spoken of only as a sacred thing with no mystery surrounding it. Then there is no curiosity. As God has chosen to put them in families together we should not separate them. It needs both minds to bring out the best there is in all their studies; then at maturity they have a truer estimate of each other. Having seen the successes as well as failures on both sides, they are better prepared to continue life's journey in families of their own, intelligently from the beginning, and save the wrecking of many lives or long years of invalidism, the result of ignorance.

It is a great mistake that a girl must be dwarfed mentally in order to become a good mother. A mere animal existence is not all there is of life; each generation should be an improvement on the preceding one, and the mother's culture and freedom has much to do with it.

A young lady of my acquaintance, an invalid, because she could see no way to independence in her own right, took up the study of medicine enthusiastically, and, in spite of much opposition, graduated at 21 with high honors, and with all her knowledge became a healthy, happy wife and mother, as well as an ornament to the profession.

True knowledge of one's capabilities and power would lessen the gynæcologist's work very much.

G. R. SOUTHWICK, M.D.: We have been talking about preventive medicine in young girls. I think an important place for preventive treatment is with the obstetrician. In my experience I find far more lesions and troubles resulting from lack of proper attention at the time of parturition and in the lying-in-room than I do from the failure to look after the education of the young girl at puberty. I would certainly and most earnestly recommend that in all cases an examination be made, about three or four weeks after delivery, to ascertain if the uterus is in proper position; if it is there to know it, and if not to replace it; if there is laceration to find it and treat it, and as soon as the period of involution is completed, if anything abnormal remain, to treat it properly. It is neglect of these things that brings patients to the gynæcologist. In regard to education I cannot endorse the statements which have been made, and pretty strong ones, too, in regard to the injury done by education of young girls. It is a theory which has spread broadcast over our land, and the statistics that have been collected do not bear out the assertions which have been made. There are girls injured, but there are young men injured as well. It is not so much the education that does harm as it is the outside influence, such as the parties she goes to; not only at puberty, but even at ten or twelve years of age, she is out late at night, and her

headaches follow next day. In regard to the use of heat and of cold, there is another way of applying dry heat to the abdomen, and that is by using the rubber coil. You can run hot water through the coil as easily as you can cold or apply heat by any other means. It is much lighter than the hot-water bag, the stream is easily kept going, and it adjusts itself very accurately to the abdomen. Iodide of lime is an old remedy for fibroid of the uterus.

HORACE PACKARD, M.D.: Our esteemed colleague, Dr. Runnels, has said in his paper, while discussing the causes which make uterine therapeutics necessary, that "there are too many conservatories of music and too many Harvard Annexes." Since there may be some misconception as to what a Harvard Annex is, I would say that it is simply a department of Harvard College where young women receive the same academical education that young men receive in Harvard or any other college. I cannot think that a single member of this Institute believes that the higher education of women has any influence whatever in producing uterine diseases or making uterine therapeutics necessary, and I should be sorry to have such a statement printed in the TRANSACTIONS under the sanction and seal of this Institute, hence I would move that Dr. Runnels be kindly asked to omit from his paper this reference to Harvard Annex.

PHILIP PORTER, M.D.: I wish to call the attention of the bureau to a drug which is now extensively employed by quacks as a "cure-all" in uterine disorders, and that is Jequirity or "Orange Blossom." This is only indicated, however, where there is granular degeneration of the cervical tissue. Otherwise I have not found it indicated. In regard to intra-uterine stems spoken of, I have used them for some time, but within the last two or three years my experience has compelled me to abandon their use altogether, and I think that our school is just now passing through the same thing as the old school, for with them the use of intra-uterine stems has had its day. I think if we study the etiology and pathology of forward displacement and anteversion referred to by Dr. Danforth, we will find that we are mistaken in regard to the influence of forward displacement in cases of dysmenorrhœa. It is due—the pain—I think, in the majority of cases, especially in the unmarried, to an influx of blood to and within the organ where there already exists a neurotic condition. And these cases are all amenable to the properly indicated remedies. My experience has been that I have resorted to mechanical treatment too much. In other words, when I resorted to expedients, I thought of and studied up the indicated drug less. In regard to the ordinary cases of stenosis, I now can only say, briefly, that the influx of blood to an organ increasing its size during the menstrual period, certainly does press upon the bloodvessels and the nerves, which are together in the form of a helix and causes this excess of pain, especially during the first day—the stage of invasion, but in the cases where the pain

is attributed to retention of the menstrual flow by the increased state of the stricture, known by some as spasmodic dysmenorrhœa, it is, we think, a fallacious theory, as can be demonstrated by examination of a subject by the physician during and between the menstrual period. While it is almost impossible to pass a sound or probe during the inter-menstrual period, the same organ will freely admit the instrument during menstruation. During the first few days of menstruation, one familiar with examining the genital organs of a woman will find the uterus standing almost erect, and as the tissues of the organ increase in size there will always be found an increase of the canal in diameter and length. Why is it quite difficult to retain a stem in its place during the menstrual discharge? Provide as you may for the easy escape of the flow, yet the stem will slip out. Witness a case of subinvolution or areolar hyperplasia—I use the words synonymously—the greater the depth of the cavity the larger diameter of an instrument can you pass, even when in the second stage of the disease there is a marked increase of cellular tissue. Understand me, I am now speaking of the ordinary cases of stenosis, not traumatic—those associated with scar tissues or an injury—but those of anteflexion. The introduction of a stem, when it is indicated, is more easily made with the patient in the latero-abdominal position, using a perineal retractor to expose the cervix. If the uterus is brought fairly down, as it can be with a vulsella or tenaculum, the stem may be placed in position without the aid of a holder. The advantage of one style of a stem over another is one of fancy only, as familiarity gives the user a preference for that particular instrument. When Sir John Paget claimed so much for Bromide of potash, the medical profession were indeed happy over the thought that at last the specific drug had been discovered, but, alas! as reports came in from year to year (and it requires years to prove the curative action of any remedy in new growths) the sad fact became apparent that even this drug had failed and we were still left with the matter unsettled. Let us, however, give the Iodide of lime, as I intend, further trial. In the use of Iodide of lime my experience in the curative results does not coincide with that of the gentlemen who have preceded me. As we all know, this form of a neoplasm may, and often does, disappear spontaneously without treatment; so, if under the action of a constitutional remedy it diminishes in size greatly, we must not attribute too much to the effect of a specific, like the Iodide of calcium or Ergot. I only wish we could pronounce upon a given remedy, but do not let us accept as facts blind theories based upon the reports of one or even two or three persons.

[J. H. McClelland, M.D., also participated in the discussion. His remarks have not been received.—Editor.]

REPORT

OF THE

BUREAU OF PÆDOLOGY.

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FORMS OF PARALYSIS PECULIAR TO EARLY LIFE.

By C. H. Goodman, M.D., St. Louis, Mo.

As far back as the last century, references are found in medical writings to a form of paralysis peculiar to infants, but so vague as to be of little service; but since the essays of Kennedy and Keene, 1836–40, more fully describing and elaborating the subject, considerable attention has been directed to this ailment, with no little degree of success.

The host of writers who have lent their pens to the elucidation of this disease have baptized it with as many names—infantile spinal paralysis, paralysis during dentition, essential paralysis of children, fatty atrophic paralysis of infancy, myogenic paralysis, regressive paralysis, etc., etc.; but the term atrophic paralysis comprehends its two characteristic symptoms at once, and the second synonym, acute anterior poliomyelitis, gives its pathological features and, by reason of their comprehensiveness, are recognized as the fittest names whereby to designate it.

The causes which lead to its development are somewhat obscure. It seems to be due to certain conditions, such as dysentery, cholera

infantum, fatigue, chilling of the body, eruptive fevers, whooping cough, rheumatism, diphtheria, hydrocephalus, meningitis, apoplexy, cerebral tumor, and rickets. Dentition and hot weather have been assigned by some writers as a most prolific cause of the disease, but of all the factors, none are so uniform as that of *age*, it being limited in its manifestations to a range between 18 months and 4 years, though a case has been reported at 12 days and one at 1 month, and it may occur as late as the 6th or 8th year. Nor does sex or condition furnish any immunity, male and female, rich and poor alike, being equally obnoxious to the disorder.

There is little to guard against in the onset of the disease, for it flies no signal of distress for the little sufferer before the calamity is on it, so sudden is the attack.

The febrile disturbance is slight, and if any exist, it disappears on the development of the paralysis, and rarely ever lasts over 48 hours, nor does the intensity of the fever afford any indication of the severity of the paralysis. Convulsions have preceded, followed by a condition of sopor, and the convulsive movements are often limited to the part affected by paralysis. The full severity of the attack is declared at once, it being at its extreme height on its first appearance, from which point it follows a course of regression of the paralyzed part, improvement being more or less marked. Atrophy ensues generally within a week after. In general, the temperature of the parts is lowered, in cold weather assuming a blue and mottled appearance. There is a diminution, amounting in cases to an entire loss, of skin and tendon reflexes, while the sensitiveness to galvanic and faradic currents is very markedly impaired. Rarely is the form hemiplegic, if so, cerebral complications should be suspected. It assumes a general character, single muscles and groups being, however, affected, the isolated being the most difficult to relieve. The deltoid is peculiarly liable, as well as the flexors of the foot, the right lower limb being the favorite point of attack. As a result of this form of paralysis, we have a weakening of the ligaments, and consequent deformities, principally in the lower extremities. Many cases of club-foot are due to this paralysis in early life. In an article on infantile paralysis, Dr. Jacobi established the following laws with regard to the liability of the muscular system to the attack:

1. It increases from the hip to the foot.

2. Of the upper-thigh muscles, the glutei infrequently, the ilio psoas hardly ever, the adductors rarely, except in total paralysis.

3. After the foot-muscles, of those moving the leg or the thigh the quadriceps extensor is most frequently paralyzed; the sartorius is exempt.

4. At the foot the tibialis anticus suffers often from isolated paralysis.

5. The tibialis anticus often remains intact, whilst the peroneus longus and brevis are completely paralyzed.

The diagnosis of this form of disease is not difficult, its character being apparent at once. A pathognomonic symptom is the failure of faradic contractility. This lessens after the paralysis occurs in from 2 to 5 days, and in those muscles which are permanently affected it is complete.

The prognosis is fairly good, so far as shortening life is concerned. In proportion as the electric contractility remains, sensibility and no fatty degeneration is the cure to be looked for, which again is decided largely by the degree of muscular atrophy. The severest and most tedious cases are those beginning with high fever, convulsions, and a great degree of paralysis. In this predominant form Sinkler has added and described others, of which an outline is appended:

I. *Spasmodic Form.*—Two kinds.

1st. Of primary spinal origin.

2d. Where there is a descending degeneration of the cord from a primary cerebral lesion.

Rigidity of the limbs in the first variety appears soon after birth, and with increasing age all attempts at motion cause rigidity of the muscles. A characteristic symptom is the extension and inversion of the feet, so that the child rests on its toes. Knees are adducted, and forward motion is by jerks, with an inclination to fall forward. Knee-jerk and ankle clonus present. Sensation not diminished, and no muscular atrophy. Adherent prepuce not a cause, though generally believed to be.

II. *Diphtheritic Form.*—Appearing in from 8 to 10 days after an attack, and chiefly in the throat muscles, though the pectoral muscles are often implicated, inducing a dangerous condition by impairing respiration.

If the ocular muscles are affected we have ptosis and a squint of the recti, whilst deafness or dribbling of the urine if the ear and vesical muscles are respectively the objective points. The paralysis is generally peripheral.

III. *Friedreich's disease* is, to all intents and purposes, a locomotor ataxia, affecting chiefly females. There is an unsteady gait,

want of patellar reflex, want of co-ordination in gait, muscular atrophy, paresis, and, later on, contractions.

IV. *Pott's Disease.*—Chiefly in the lower extremities, being due to spinal caries, a myelitis, or a meningitis, in the latter form inducing pain and contraction of the legs. If we have a transverse myelitis, there is numbness, pricking of the legs, absence of sensation, increased loss of power, and atrophy.

V. *Pseudo-Hypertrophic Paralysis.*—This affection is rare. There is an apparent growth of muscle with attendant muscular paralysis, due to a loss of tissue and a substitution of fat. It begins with a weakness in and widening of the legs in walking, with a peculiar balancing of the trunk. From a weakness of the erector spinæ muscles we have spinal curvature. The method of getting up from a sitting posture is very characteristic, it being progressively from hand to knee. Now there is marked hypertrophy, but later on a wasting and shrinking of the muscles. The loss of power is gradual and fatal. The skin is mottled, like castile soap, tendon reflexes being lost as well as electro-muscular contractility. The mental equilibrium is decidedly disturbed. It is slow in progress, but positive to its termination.

To the above is added one other, the obstetrical form, or palsies of cerebral origin, due to compression by forceps on the portio dura at its exit from the magnum foramen, or from difficult or prolonged labor. It is permanently hemiplegic, with a marked stoppage in the development of the side affected. Convulsions are generally present preceding or following, and recurring from 7 to 15 years of age, and are epileptiform in character. The expression of the face is vacant, the prognosis bad.

Paralysis among infants and children is much more frequent than supposed, and it is not always an easy matter to determine its true relation. It is well to keep in mind a few leading diagnostic points.

In the *cerebral* form, or paralysis proceeding from *brain* centres, the mind is generally disturbed, and convulsions are usual. It usually limits its action to one lateral half of the body, with contraction of the flexors more in arm and upper parts. The bladder and rectum are not often disturbed.

Spinal variety: convulsions are rare and the contractions and muscular irregularities are mostly in lower extremities; the mind undisturbed, and general health remains good. The following table is after Hatfield with additions.

	Onset.	Extent.	Sensation.	Tendon Reflex.	Temperature, Parts Affected.	Muscular Change.	Electric Excitability.	Contraction of Limbs.	Sphincters.
Infantile Spinal Paralysis.	Sudden.	Complete, followed by localization.	Undisturbed.	Lessened or abolished.	Lowered.	Atrophy.	Diminished.	None.	Normal.
Spastic Paraplegia.	Gradual, preceded by weariness.	Rarely complete, lower half of body.	Undisturbed.	Greatly exalted.	Normal.	No atrophy, no change.	Undisturbed.	Very marked.	Normal.
Acute Myelitis.	Sudden.	Complete.	Diminished.	Abolished, diminished, normal or exaggerated.	Falls, but not so great as in No. 1.	Muscles waste rapidly.	Diminished.	None.	Paralyzed.
Pseudo-hypertrophic Paralysis.	Gradual, with extreme weakness.	Partial.	Not disturbed.	Diminished.	Higher.	Both of atrophy and hypertrophy.	Diminished.	To some extent toward end of disease.	Weakened.
Paralysis from Pott's Disease.	Sudden, with Pott's history.	Complete.	Anæsthesia.	Abolished, diminished, normal or exaggerated.	Falls slightly.	Atrophy.	Diminished.	None.	Paralyzed.
Diphtheritic Paralysis.	History of diphtheria.	Partial, and generally localized in fauces and pharynx.	Diminished.	Lessened or abolished.			Diminished.		In rare cases paralyzed.
Friedreich's Disease.	Gradual.	Partial or complete.	Paresis.	Lessened or abolished.		Atrophy.	Diminished.	In the last stages.	Normal.

INFANTILE SPINAL PARALYSIS, WITH TREATMENT.

By C. D. Crank, M.D., Cincinnati, O.

What is Infantile Spinal Paralysis?

It is a form of paralysis observed most frequently between the ages of six months and the third year.

It has occurred as early as the second and thirtieth days, and a few cases are reported in adult life.

It is the cause of fully one-half of the cripples and club-feet we meet with and observe on the street.

Diseases of the nervous system are among the most complicated and obscure of human ailments.

The want of opportunity for pathological research has made it a rich field for theorizing and speculation.

Up to 1863 only five autopsies upon subjects afflicted with this form of paralysis had been reported. Since that date, however, numerous investigations have been conducted which have contributed much to our knowledge upon this subject.

For a long time the reflex origin—dentition—intestinal and genital irritations were regarded with most favor, nearly all observers claiming that it was unaccompanied by structural changes. Later it was thought, and cases presented in proof, that certain alterations in muscular fibre was a prime factor, a cause and not an effect. Other authorities or writers, while believing the paralysis due to peripheral causes, were undecided as to its exact nature. When we consider the exposed position of the peripheral nerves, their liability to injuries and to the effect of heat and cold, we cannot but agree with them that it is the seat of many morbid nervous disturbances. Pathologists have well demonstrated, however, that in a large majority of cases infantile spinal paralysis is accompanied by structural lesion at the central point, and neuropathists are almost unanimous in the opinion that it originates in the motor region of the cord, in the anterior gray

horn. The exact nature of the lesion they are not as well agreed upon, some claiming that atrophy of the ganglionic nerve-cells constitutes the lesion, the surrounding tissue being perfectly healthy, thus establishing idiopathic atrophy of the ganglionic cells as the characteristic lesion. Others claim to have frequently found a general involvement and destruction of the gray nervous tissue, containing the focal lesion; simple myelitis involving the anterior gray matter of the cord—atrophy of the cells—a part, not the whole, or even the principal part in the anatomical alterations.

In a report to the International Congress at Amsterdam, Drs. Damaschino and Rogers gave the following summary of the results of their investigations:

1st. The anatomical lesions are situated in the motor region of the spinal cord.

2d. They consist of a central myelitis with a stadium of softening and atrophic destruction of the cells of the gray substance, together with sclerosis of the lateral columns, and considerable atrophy of the anterior roots and nerves leading to the paralyzed muscles.

3d. Atrophy of the cells is not, as Charcot claims, the whole process as in progressive muscular atrophy.

4th. The opinion of Leyden that there is a circumscribed and a diffuse myelitis in children is worthy of consideration.

5th. It remains for future examinations to decide whether myelitis begins as interstitial or parenchymatous,—in the cellular tissues or in the nerve-cell.

Since this report, Damaschino has made valuable contributions to the pathology of this form of paralysis, but it does not appear to bring us any nearer to a satisfactory explanation as to the cause.

What is the initial influence productive of this condition?

Reviewing the cases reported, we observe:

1st. That a majority occurred during the second year.

2d. That more than two-thirds occurred during the heated months of July, August and September.

Let us briefly consider these two facts:

1st. Majority of cases reported occurred during the second year.

What is the existing element at this particular period rendering the nerve-centres so sensitive to structural change? Is it not a condition growing out of the rapidly developing organism?

We know that about this time of life (second year) the nervous

system attains its maximum of physiological irritability. The nervous, vascular and nutritive systems are in a state of excitability, in consequence of which we have convulsions, rachitis, cerebral and intestinal troubles, and why not spinal irritations and paralyses?

2d. We observe that nearly all reported cases occurred in July, August and September. What relation does heat bear to this condition?

I have long considered that many of the intestinal troubles of infants were due to an irritation of the anterior horn. May not the continued depressing influence of summer heat upon this portion of the spinal tract result in acute myelitis, degeneration of nerve-cell, and finally paralysis?

It has been attributed to blood changes, and cases are reported as sequelæ of measles, scarlet fever, whooping cough and diphtheria.

Traumatic influences no doubt play an important part; also shocks and exposures.

Cordier, in a recent number of the *Medical Gazette*, Paris, reports an epidemic of this formidable malady. He states that during June and July, 1885, in a community numbering not more than fifteen hundred (1500) inhabitants, he was called upon to treat thirteen cases. The ages varied from one to thirty months. Almost all were in perfect health previous to this epidemic. Definite and characteristic lesions accompanied each case, *i.e.*, atrophy, paralysis and deformities. These thirteen cases occurred within narrow limits as to time, place and population. It cannot be believed that they were simply coincident.

Simons reports three cases in one family, quickly following each other. If it be true that cerebro-spinal meningitis is caused by certain *schizomycetes*, finding their necessary nourishment in the pia mater, and causing, by their growth and development, such change that the walls of the capillaries of the pia become altered in their structure, then we may look upon these consecutive cases of paralysis as indicating a specific infecting agent.

Whatever view we may hold, it is evident that we are not in possession of a general sufficient cause, and much remains to be determined.

The cases accompanying this paper are not exceptional ones.

The child may retire perfectly well to all appearances, and the paralysis be observed on awakening.

It may occur suddenly during the day. It may be preceded by high fever, vomiting, convulsions and coma.

There is no true relation between the intensity of symptoms and the extent of paralysis. If the child be old enough, it may complain of a tired feeling, or of a pain in back or limbs.

The bowels are sometimes loose, the bladder undisturbed. The paralysis may involve one or more parts, an arm, or one leg, or it may include all the limbs.

Usually the anterior muscles of one or both legs are stricken. If both legs are involved, in a short time it will be found that one limb is more seriously affected than the other. It is a marked feature that when first observed the paralysis is at its height, and a regressive movement soon follows. One or more of the muscles or parts give evidence of improvement. The sooner this regressive movement begins the more favorable the prognosis. Soon after the paralysis the muscles longest affected begin to waste. The degeneration is not limited to the soft tissues, for the bone ceases to develop, and cartilages, tendons and ligaments join the atrophic destruction. Sensation usually is not disturbed, though some cases report a degree of hyperthesia.

The temperature of the affected parts is found to be subnormal and always lower than the corresponding parts. The mind is undisturbed and the health of the child continues good.

After a short time they may be able to effect feeble flexion and extension, but the strength has gone out and the limb lies almost powerless.

The relation of the affected muscle to electricity is changed,—the healthy responding best to the faradic current; the stricken muscles fail to respond, and with the galvanic current we obtain the so-called reaction of degeneration.

In infancy two forms of paralysis are more frequently met with—infantile *spinal* and infantile *spastic*. The former, as we have shown, is due to a diseased condition of the spinal cord; the latter is due to cerebral complications. How will we distinguish them?

1st. By the mental symptoms. In the spinal form, even if preceded by convulsions and coma, on awakening, the mind is not disturbed and the disposition is unaltered; in the spastic form we usually have more than one convulsion, the mind is affected, disposition changed, and general health of the child impaired.

2d. By carefully observing the condition of the stricken parts; palsies proceeding from cerebral conditions are not followed by rapid muscular changes, neither do we find a subnormal temperature.

3d. The spinal form usually affects the muscles of the lower extremities; the spastic form prefers the muscles of the upper parts, about the head and face. There are exceptions to this rule in both forms.

4th. In the spinal form the knee-jerk is unaltered unless the muscles of the thigh are involved; in the spastic form it is lost.

5th. In the spinal form we note a diminution and ultimate loss of reflex excitability with the degenerate galvanic reaction, while in the spastic form it remains intact.

Treatment.—"What can be done for a muscle when its nerve-centre is dead?"

Galvanism, faradism and counter-irritation to the spine are the usual remedies employed, and all with variable success, complete recovery being the exception. Some of the best writers question the benefit claimed from the use of these or from any other treatment, the improvement being a natural regression of the paralysis. Others claim that internal therapeutics are of no effect unless there be some failure in the general health. Again, we are told, that in the early stage, when inflammation of the cord is first determined, it is possible to modify the condition by proper treatment, but when it has passed into a chronic stage, the prevention of deformities is about all that can be done.

When the paralysis has continued until degenerate changes have taken place in nerves or muscles, of course our prognosis is unfavorable, yet to abandon the case is well-nigh criminal.

It remains our duty to favor circulation and nutrition of the parts, to give the functions every possible encouragement in their effort to return to their normal condition. Paralyzed muscles do not at once resume their normal action, even after the cause producing the paralysis has been removed, hence the necessity of our assisting them. Whatever be our feelings, the worst thing possible is for the physician to lose all hope. I know of no condition where recovery or improvement is so dependent on the patience and perseverance of the physician as this.

When nutrition is impaired in nerve centre or branch, extreme difficulty is experienced in the attempt to restore the integrity of its

functions. Even the physiological processes which are so active at this period of life tend to increase the exhaustion, therefore the best of nursing and care in providing means for the nutrition of the palsied muscles is absolutely essential. To this end we employ massage and electricity.

Both should be called early in the attack and continued for months with short periods of interruption.

For the first few days it may be best to limit the treatment to massage alone, gently rubbing the muscles a few minutes at a time and gradually increasing from mild friction to deep kneading and more severe exercise.

Immediately after massage it is well to wrap the parts in warm flannel.

If the parts appear cold, place a bottle filled with hot water beside the parts affected. This gentle treatment, if it does not assist nature in her efforts to restore the integrity of the parts, certainly will not increase the exhaustion by *over-stimulation*, a possibility we must never forget.

In connection with massage we employ electricity. For a time it was supposed that the beneficial effect of this agent was limited to the restoration of lost muscular contractility—an aid simply to the return of nerve-force. But to-day it is successfully applied to the very seat of spinal affections—to the spine itself. It is also shown that motor nerves are more readily stimulated the nearer the current is applied to the central connection.

The galvanic current is better adapted to the treatment of the spine, and the faradic in relieving the effects of the lesion upon peripheral muscles. Unless the muscles respond, however, very little if any benefit is to be expected from the faradic.

Jacobi remarks that faradization cannot modify the inflammatory lesion of the cord, and as a means of averting degeneration in *completely* paralyzed muscles, it is inferior to galvanism, and should not be used upon those muscles which refuse to respond or contract under its stimulus. Its utility (faradic) is best seen in its application to muscles *imperfectly* paralyzed and liable to degeneration from inaction, and to be overborne by their antagonists. It is to be employed to excite the *partially* paralyzed muscles to action, in this way keep up circulation and nutrition and prevent atrophy.

It is not necessary to employ a strong current, though the faradic

may be used longer and oftener than the galvanic. Too often, electricity is overdone. In the hands of the inexperienced it may become a source of harm. Sensation has not been diminished, frequently it is quickened, and the current must be guarded, else it may prove both painful and harmful to the child. A mild current, thoroughly and properly applied, is better than a stronger current. There are but few exceptions to this rule.

I always employ the current which yields the best response. Usually it is the galvanic—the positive pole placed over the paralyzed muscles, and the negative at some distant point.

If tenderness exists along the spine, I apply one pole of the galvanic current directly to the tender spot, and the other either to the right or left a few inches. In some instances, I have combined the two; that is, using first the faradic and ending with the galvanic. Erb recommends central galvanization as an antiphlogistic remedy in myelitis,—a large anode placed over the spine at the presumed seat of lesion, while the cathode is applied over the abdomen.

Dive reports success in the treatment of infantile spinal paralysis with electricity. He recommends the employment of the two currents during the same séance. The galvanic he finds most effective when used during the early stage. The paralyzed muscles should be subjected to the action of the faradic, and at the same séance the continuous should be used; the positive pole placed upon the vertebral column at the supposed seat of the trouble, and the negative upon the course of the nerves which go to the palsied parts. During the last three minutes of each treatment, both poles of the constant current may be placed upon the vertebral column, one a few inches above or from the side of the other. This treatment is repeated every two days.

If necessary, apparatus should be applied early, as it often prevents deformities, and enables the child to get about and thus bring other muscles into exercise.

No doubt much can be done by manipulation to prevent deformities, but what can we do to prevent also subluxations arising from muscular and tendonous shortenings?

This would take me beyond the purpose of my paper, and I can only refer you to the authorities upon this subject. Orthopædic surgery is a special work, and is making rapid advance in this very important field.

INFANTILE SPINAL PARALYSIS AND ITS TREATMENT.

By S. Lilienthal, M.D., San Francisco, Cal.

An old trite tale is this poliomyelitis anterior acuta of infants, and in the year 1877 I wrote a lengthy essay on that disease for the February number of the *North American Journal of Homœopathy.* Twelve years have since passed, the literature of nervous diseases and of infantile diseases has multiplied, and still we find very little progress made in our knowledge of the disease.

It may be truly said that in its primary stage it ought to yield curative results to any treatment, but *post hoc* is not always *propter hoc*, and most cases improve wonderfully during the first few months without any treatment whatever, and then all amelioration ceases, the children grow up to manhood or womanhood and they limp as long as they live. Even orthopædy, so full of mechanical invention, fails here to bring relief, and the high boot, so useful in rachitic complaints, cannot be tolerated by a weak atrophic limb.

It is an old trite maxim that *sublata causa tollit effectus*, but the trouble is we do not always know the cause, and even when we know it, we cannot always remove it. The infant goes to bed in its usual health, and in the morning the paralysis is there, though it may be a few days till it is accidentally detected. Dentition, cold, a fall, and other things are passed in review, and the chief cause is hidden away and the perfect man or woman is a thing unknown in our age of high civilization and high pressure. I have now in my mind a young lady, who was struck down with this acute poliomyelitis when hardly two years old, and she limps to-day on her atrophied leg, which has no strength whatever, and she has to be very careful to escape accidents. Her father is now between 70 and 80 years of age, her mother past 70, both in their good old age enjoy health; and still on the father's side there is one brother insane, and another brother just

escaped the lunatic asylum by shuffling off this mortal coil. One sister of this young lady suffers from a tumor in the brain, is blind and epileptic, and my limping friend extremely nervous and irritable. I could enumerate several such family histories, and if we only take heredity in its broadest sense we meet an unknowable something which lies at the root of too many afflictions and which too often baffles the very best treatment. Laugh and deride Hahnemann's psora-theory as much as you like, call it in scientific language morbid or morbific disposition, our old master struck the keynote to the treatment, be it tuberculosis or paralysis, when he gave us the antipsorics, and Schüssler followed up this grand idea when he studied out the action of his tissue remedies. There is a mine yet undeveloped in that direction, and the old school is hard at work to detect the ætiology of disease-germs. Virchow's cellular theory, discarded once, is brought again into the foreground, but it does not go to the bottom; there is a something yet behind it, which the worker in the bacterial laboratorium will never find out, and it is the duty of the conscientious physician to rouse up the depressed vital force and thus enable it to oust the intruders and to establish again that equilibrium which we call health. Let us be grateful to the scientists who work out the theoretical part, let us do our share in the practical part, let us remain the healers, and this we can accomplish with more or less success, the more we follow, without reservation, the precepts of the master.

There are in that essay two or three letters which deserve republication, as they show what our best physicians thought about the disease and its treatment.

"Father Hering writes, that he treated cases of atrophic paralysis and has been most successful with Sulphur, and when this failed, he gave Psorinum. When something is gone, destroyed, it cannot be restored, and such cases remain incurable."

Even a Hering is not infallible, and we put against this last *dictum* of the revered C. Hering, a remark of the distinguished pædiater of Berlin, Professor Henoch, who remarks (*Diseases of Children*, p. 98): "Although some maintain that electricity does not have much effect, or that all hopes must be abandoned if a successful result has not been achieved at the end of the year, this view is opposed by the successes obtained by Duchesne and others, even after the lapse of this period. *We can only give the advice to be persistent in its use.*

I repeat, that the treatment, in obstinate cases, must be continued *for years*, before it is abandoned as hopeless. Gymnastic exercises are especially advisable in combination with electricity."

In this very remark of Professor Henoch lies the keynote of our treatment. When the paralysis is obstinate, the physician and the parents must not lose courage, they must not give up the ship, but persistently try to restore the functional activity in these tender limbs. We are all too apt to give up treatment where not the least trace of improvement is seen after a few months; we imagine that degeneration has already taken place, that there is no further use to spend time and money on the case, and thus we condemn the poor child to a crippled existence for life. Is it not far more sensible to fight even against hope, to keep up the battle, especially as we have such excellent auxiliaries in our antipsorics, and when Hering speaks of his successes with Sulphur and Psorinum, we cannot do better than to follow such an encouraging example.

Dr. Adolph Lippe, whose death we lament this year, though we may be thankful that he was spared to us for so many years, writes: "Cases of atrophic infantile paralysis only come to us from the physiological, *vulgo* the common school of medicine. I never had a case in my own proper practice; we never can possibly reach that hopeless condition. As far as my own clinical observation goes, I rely first on *an improved diet, the similar remedy, and an application of electricity* to the suffering part of the body—the atrophic and paralyzed part."

The old war-horse, grim Count Lippe, does here an injustice to the old school, for the disease may set in over night, as it were, and it is sheer nonsense to blame the physiological process of dentition for it, and many a child catches cold, or has a fall, or even the measles, without such a dreadful sequela. Let us rather ask, what changed the physiological process of dentition to a pathological one? And when the child had no cold, no fall, no zymotic affection, what is the unknown cause of it? Could it have been prevented? We ponder and conclude that an affirmative answer might be given, and that the old proverb holds good also in our case, that "in time of peace, prepare for war." How many physicians attend to the welfare of these little ones, when they *apparently* enjoy good health? How many mothers (too often, now-a-days, the mother confides the whole care of her infant to the French or Irish nurse) know anything about the diet

suitable to the individuality of their infants, and how few physicians ever made the hygiene and diet of the nursery a particular study!

There are many Fellows in this American Institute of Homœopathy, who would consider it indecent and against their own sense of propriety to prescribe such a vulgar and nasty staff as Psorinum or Syphilinum, and who boast about their high sense of professional honor, not to prescribe anything which the microscope cannot detect, and still that little mite of humanity might escape dire consequences if, at that early age, the seeds of hereditary influences could be exterminated by the dynamic action of just such nasty, immaterial material. We recollect well such a case in our own practice, where the child, despite the utmost cleanliness, had a dirty, scurfy skin, nursed well, and seemed apparently well, but was the pest, instead of the pet, of the household, for it screamed all night, and took its nap in daytime; Jalapa and Senna failed, but a few little pellets of Syphilinum changed the aspect; gradually the skin took on a healthier color, and the stools lost their unusual odor. We might call this perhaps an exceptional case, but still many a physician deprives himself by such exclusiveness, not only of the means to do good immediately, but also of a powerful aid to prevent these fatal germs from performing in later years their destructive actions.

In relation to the diet of children, allow me to refer you to the eleventh chapter in Eustace Smith's *Wasting Diseases of Children.* He gives us three dietary rules for children in health and disease, and by following them we will spare the infant many a pang and the mother many an aching hour. In fact, I cannot recommend too highly the classical writings of this able author for your perusal.

Well, suppose we will make a trial with your nosodes or with your brimstone, how often must the prescription be renewed? A conundrum to many, and still so easily answered. Give the drug time enough to exhaust its action, and do not repeat as long as amelioration lasts. Grauvogl gives us here good hints, and I am sure that his *Text-book of Homœopathy* has a place in the library of every homœopathic physician. One dose of Psorinum goes a long way, and its action would be spoiled by too frequent repetition. It is far different with some of our other antipsorics, and Grauvogl points to differentiation between the medicinal and the nutritive action of our antipsorics; Buchner's adjectives to the drug loom up in great importance, and no wonder that Schüssler thinks so much of his salts

of lime, of soda or potassium, and of silicea. Let us work out that mine for the benefit of our little patients, and we will not meet so many limping girls on our streets, who, too often, wear long and unhealthy dresses to hide their deformity.

The question is still undecided, whether the disease is always of central origin, and whether it might not be at the beginning a peripheric neuritis, a question which we also see discussed in relation to other diseases of the spinal cord. Such a case seems to be the one reported by Carroll Dunham, "where the pain ceased under Ledum and Lachesis, and the paralysis yielded to Secale 200, which was also indicated by the diarrhœa to which the boy was subject. At first the limb was not at all sensitive to the faradic current. It subsequently became so. In a year the lad could walk, but the limb was then decidedly atrophied, and shorter than the other." Might we not ask, whether Henoch's advice was carried out, and the treatment continued long enough to overcome the obstacles engendered in the diseased foci of the spine, before degeneration stamped it as an incurable affection.

To strengthen my proposition about the heredity of this disease, allow me to quote a high old-school authority. In the *Allgemeine Med. Central Zeitung*, No. 57, 1878, we read that Seeligmuller accepts three different forms of infantile, spastic, spinal paralysis: 1, without atrophy, which might be mistaken for the common spinal infantile paralysis; 2, with atrophy, frequently simulating progressive muscular atrophy; 3, with muscular hypertrophy. All three forms are characterized by the spastic affection of the muscles, which is permanent in Nos. 1 and 2, but appears only periodically in No. 3. Charcot considers them an affection of the lateral columns of the cord. *Consanguinity, especially intermarriage between cousins, could be proven in every case so far observed.* It is of an hereditary character, and has been observed in several generations of the same family. This hereditary tendency is well explained in a late number of the New York *Medical Journal*, February 11, 1888, where Dr. Van Schaik remarks, that we often do not recognize the heredity of disease because it has come by atavism or by the process of skipping one generation.

So far our mind reverts more to the prevention of the disease, and to the eradication of the unknown psora, or whatever you may call that tendency to hereditary disease, and for which we have our

antipsorics and nosodes to aid the *vis medicatrix naturæ* in this laudable enterprise. Hygiene, suitable diet and antipsorics take the first rank in our therapia, but when we have to deal with the disease itself, because prevention was neglected, our treatment may still be successful, aided by electricity and gymnastics. Of our drugs, I would especially mention Gelsemium (500th to 1000th potency), Veratrum viride, Belladonna, Nux vomica or Rhus in the first stages, before atrophy has set in, and at that later period, Causticum, Phosphor., Secale and Plumbum.

It would be only "love's labor lost" to go into the minutiæ of single indications before such a learned assembly. We do not prescribe according to the name of a disease, but according to the principle of similarity between symptoms of the diseased state and its corresponding drug. Our materia medica, based on facts gained from sensible, living, human beings, is an open book to all who wish to gather therefrom the fruits of their labor. Success can be gained by any one who is not afraid of the task, and with such material on hand, no disease should be considered incurable. Incurability is a fatal word in the mouth of a physician, for he who does not hope cannot impart that magnetic influence to the mind of his patient. Encourage hope, and be yourself convinced of it, and half the battle is gained. What dose would you recommend? The old point of dispute, but not every one is a race-horse, and the delicate constitution of an infant ought to be more easily impressed by a higher potency than many a physician is in the habit of prescribing. The *similimum* first and last, and then let us individualize in relation to the potency suitable to the case in hand, and remember it is often far more advisable to change the potency, be it high or low, than to change the remedy, and in obstinate cases, after prescribing the *similimum*, Saccharum lactis, pure and unmixed, remains a prescription of the first order, as it allows the remedy time to act, and this tincture of time, in large doses, will benefit and satisfy the patient, and allow the physician still more time to study up his case.

POST-DIPHTHERITIC PARALYSIS—ITS PATHOLOGY, ÆTIOLOGY AND DIAGNOSIS.

By William Owens, M.D., Cincinnati, O.

Post-diphtheritic paralysis is a sequela of diphtheria, and is no more an essential part of that process than is pyæmia an essential part of a surgical operation. It must therefore be regarded as an accidental condition and secondary to gangrene, croupous diphtheria or septicæmia. It arises from anatomic pathological lesions attending some of these conditions in which capillary hemorrhages, apoplexies or infiltrations are present, interfering with or destroying the functions of the nerves which supply the parts affected. Oertel states that numerous and large apoplectic infiltrations and deposits are found within the cranium, in the dura mater and in the pia mater far down into the sulci, and that they have been observed in the medullary substance, in the commissures, in the optic thalami, the striated bodies, the crura, the pons, and in the choroid plexus of the ventricles. They have been traced along the medulla oblongata to the spinal cord, and along the spinal cord into the intervertebral ganglia and roots of the spinal nerves and their connective-tissue envelopments. The spinal nerves and their sheaths become infiltrated and swollen to nearly twice their usual size. This swelling and thickening of the nerves and their sheaths greatly interferes with the functions of these nerves and is the cause of the muscular paralysis, after diphtheria—which if long-continued gives rise to atrophy and softening of the tissues. This condition may be removed in the course of time by judicious management.

The capillary hemorrhages and infiltrations taking place at the base of the brain press upon and interfere with the functions of the nerves which take their rise here, and cause paralysis of the muscles about the mouth and throat, and furnish us with the earliest and

most frequent indications of post-diphtheritic paralysis. The velum, uvula and vocal cords are usually the first to lose their sensibility and motility. Sometimes one side alone is affected, at other times both sides become involved. These conditions interfere with the functions of vision, speech, hearing, deglutition and expectoration. The speech becomes thick, guttural and inarticulate; liquid food persistently returns through the nose, while solid and liquid foods both have a tendency to fall into the relaxed and open glottis and thus endanger life. Large quantities of mucus accumulate in the nasal and pharyngeal cavities and are expelled with difficulty.

The hemorrhagic apoplexies and infiltrations into the intervertebral ganglia and their nervous proliferations in the lumbar region are said to be more extensive than in any other portion of the spinal tract, and as a consequence the lower extremities are second in point of time, in loss of motion and sensation. This is manifest, first, by numbness, with sensation of coldness in the toes and feet. This is followed by feeling as if pins and needles were sticking in the parts. Sharp pains extend into the feet and ankles. The legs feel weak and exhausted, the patient loses control of himself and sinks down utterly helpless wherever he may be. The loss of sensation in the upper extremities usually comes later, and begins at the ends of the fingers with tingling numbness and formication. The sensations are as if the parts were asleep. These conditions extend over the hands, arms and shoulders. The patient soon loses control of the movements of his arms and hands, they lie in any position in which they may be placed. The loss of motion usually precedes the loss of sensation and is more complete. The neck and body undergo similar changes, showing that the cervical and dorsal regions are passing into a similar state, and that the intervertebral ganglia and nerve-roots are becoming infiltrated and nerve function arrested. The patient soon becomes unable to raise his head or change his position without assistance. The bladder, rectum and diaphragm may become involved later. The muscles of the chest and heart fail to respond. Respiration and contractions of the heart become slower and slower until paralysis of these parts become complete, when cyanosis and asphyxia close the scene.

Ætiology of Post-diphtheritic Paralysis.—Assuming that our views of this condition are correct, we shall endeavor to point out what seems to be the causes which precede and attend this state. These

are twofold, predisposing, and active or immediate. The predisposing are two, first and most prominent, the diphtheritic process itself, and the second is diathesis or constitutional predisposition, or a tendency to a pyogenetic condition, and a great liability to become septæmic from the slightest causes; persons who recover slowly from the acute disease; persons of low vitality and poor nutrition.

The direct, active or immediate cause of post-diphtheritic paralysis will no doubt be found in the secondary conditions of gangrene, capillary hemorrhages or septicæmia.

Gangrene not only destroys the parts locally but often involves nerve-trunks which, for the time being at least, causes paralysis of the parts supplied by these nerves. *Capillary hemorrhages* arrest the functions of the nerves of parts by infiltration and compressing them, while septicæmia brings about a similar result by inducing hematic changes, paralysis of the vaso-motor nerves and relaxation of the vascular walls, with transudation of serum, extravasation, infiltration, etc., giving rise to œdema and loss of power.

Another and very frequent cause of post-diphtheritic paralysis will be found in the too common habit of removing the diphtheritic membrane by violence, by tearing it off, or burning it off with caustics, alcohol, astringents and the like; nothing could be more pernicious than this, increasing the irritation and extending the inflammation without any corresponding benefit; for by whatever process the membrane is removed it soon re-forms again and usually extends over more surface than before; the second or third formation is always thicker and more dense than the former ones and consequently more liable to induce secondary conditions. The ingestion of solid food is subject to the same objection; attempts at deglutition of solid masses or boluses will cause an abrasion of the already diseased epithelium covering the false membrane and thus expose it to the access of micrococci, which tend to develop putrefactive changes in it. The absorption of this putrefactive matter gives rise to blood poisoning. As long as the epithelium remains intact, the micrococci can have no access to the diphtheritic membrane and we shall have no decomposition of the membrane and no septicæmia. Putrefactive decomposition, absorption and septicæmia are essential and successive steps in the production of post-diphtheritic paralysis. It is the rule that the more extensive and dense the false membrane of diphtheria, and the more violent the primary attack, and the more meddling in

the management is indulged in, the greater will be the liability to post-diphtheritic sequelæ.

Diagnosis of Post-Diphtheritic Paralysis.—The first question which presents itself in the diagnosis of this condition is this: Has the person sustained recently an acute attack of diphtheria? Second, If so, what was the method and means used in treating it? And third, What were the sequelæ, if any? And was there local infiltration, gangrene, croup or septicæmia? These questions answered, we are prepared to consider the significance of the phenomena attending post-diphtheritic paralysis.

The first and perhaps the most important symptom which will arrest our attention, is the secondary fever, which usually sets in between the fourth and eighth days after the primary attack. This may occur, though the pseudo-membrane in the throat, nose or other mucous surfaces have not wholly disappeared.. The appearance of secondary fever at this time will be a very certain indication that further trouble may be impending. The temperature may increase from two to four degrees and is quite persistent. The pulse becomes hard and cord-like. Soon to be followed by apoplectic hemorrhages within the cranium, infiltration into the ganglia, glands, and connective tissue and along the spinal cord; difficulty in hearing, speaking and swallowing supervene, with loss of motion and sensation in the extremities. Should the paralysis progress further, complete loss of power over the voluntary muscular system comes on, invading one group of muscles after another until, in many cases, the patient becomes utterly helpless; and yet some of these extreme cases do recover and often after months are as well as ever. A differential diagnosis is not difficult in post-diphtheritic paralysis. The history of the case from the primary diphtheritic attack will afford us ample means of differentiating this condition. The sore throat with tenderness beneath the angle of the lower jaw, not found in any other acute disease. The pseudo-membrane in the throat *beneath the epithelium.* The membrane is fibro-plastic in character and spreads over the surface continuously from a small spot or centre, and is followed by paralysis of muscles in groups beginning with those about the throat.

Scarlatina is more nearly allied to diphtheria in some of its features than any other disease. It has high fever, soreness and general redness of the throat, velum and mouth; it has a dark red-bronzed

color, much swelling of tonsils, occasionally gangrene of mucous membrane with offensive odor, ulcerates in patches, no extended plastic membrane; scarlet-bronzed appearance over the whole body—rarely followed by paralysis.

Follicular Tonsilitis.—Has redness, much swelling and painful sore throat; small ulcers may appear on tonsils; no plastic membrane, no paralysis.

Croup.—Has high fever, dry hoarse cough, diffuse redness of fauces, palate and pharynx; plastic membrane in the throat, *upon the epithelium instead of into and beneath it, as in diphtheria.*

POST-DIPHTHERITIC PARALYSIS—WITH CASES.

By Robert N. Tooker, M.D., Chicago, Ill.

The paralysis which accompanies or follows diphtheria is by no means peculiar to this disease. It does not differ in any essential respect from paralysis following other and more trivial affections.

A neurosis quite analogous, not infrequently follows a simple angina and may result from general debility.

While it most frequently affects the tissues of the throat, rendering deglutition difficult, altering the tone of the voice and affecting the powers of articulation, it often implicates other parts, and may indeed be general in its effects.

But paralysis of similar character, behaving in a precisely similar manner has been observed in typhoid and remittent fevers, and has been known to follow dysentery, diarrhœa and teething. There is nothing therefore of a specific or peculiar character in the paralysis which follows certain cases of diphtheria and which has come to be known as "*post-diphtheritic.*"

Any exhaustive disease, any malady which profoundly disturbs nutrition, is liable to be followed by a local or general paralysis. It is a physiological axiom that the nerve-centres, as well as the nerve-branches must be regularly and completely nourished or impairment of function is liable to result.

Neurasthenia is only a technical term for starved or exhausted nerves. Post-diphtheritic paralysis is never a true paralysis, but rather a limited neurasthenia. The affected nerves are more asleep than dead; the damage is usually more apparent than real. The lesion is generally temporary, not permanent.

All clinical experience goes to show that no disease so rapidly affects the vital powers as diphtheria. No other disease is so rapidly followed by exhaustion. No other disease is so thoroughly and essentially adynamic in its character.

We must bear in mind always in considering the phenomena of disease, that the human organism is a machine rarely perfect in all its parts and bearings.

The nervous system with its complex ramifications is at all times subject to aberrations of function. This is especially true during the period of childhood, when an attack of diphtheria is most liable to occur. It is during the period of development that all diseases are most mischievous.

For this reason it is only the few who reach maturity with a perfect physical organization. General or local weakness is the rule rather than the exception. Irregular physical development may pass unnoticed until disease makes patent an hitherto undiscovered flaw.

A disease like diphtheria, which so quickly prostrates the vital powers, is the one of all others to develop or make manifest any inherent weakness or organic defect. So long as harmony obtains between co-related parts there is health, but when this harmony is disturbed, even in a slight degree, there is ill health, disturbance of function, and often times such a modification of organic action as to simulate organic disease.

A sudden change in the character of the blood may so alter the action of the heart as to lead to a suspicion of organic lesion. Indeed such fortuitous circumstances may lead to sudden death and only post-mortem investigation enable us to distinguish between what was a remediable and an irremediable malady.

Until quite recently pathologists have expended their energies in searching for a special cause for every morbid phenomenon. The microbe has eclipsed the blood corpuscle.

In the study of germs and their spores we seem to have forgotten the rudiments of physiological knowledge.

In search of the unknown and the mythical, we have turned our backs on the clearest facts and truths that physiological study has demonstrated over and over again. A speck on our mental retina has shut out the all-pervading sunlight of time-honored and world-recognized truisms.

If Hahnemann taught the world anything, it was the worthlessness of crude drugs in the cure of disease.

The human organism cannot live on poisons, even when given in small and attenuated doses.

Without meaning to underrate the value of drugs, when properly selected and properly given, I am more and more convinced that we, as homœopathists, place too much reliance on the specific action of our remedies and too little on sustentation and stimulation.

While this is true in a general way, it is especially so when regarding the affection we are now considering.

What is the cause of diphtheritic paralysis? What do we know of its nature and origin? It does not modify the importance of the question, that only from one to three cases of diphtheria in a hundred are complicated by it. Why should any be? The answer to the question practically involves the whole history of the disease and its most successful treatment.

If we can cure the primary disease, we ought surely to prevent or cure its sequelæ.

Causes of Post-Diphtheritic Paralysis.

Since the publication of Maingault's *Monographs* (1854–59), much attention has been given to a study of this form of paralysis. Many authorities, following Oertel, regard it as a progressive peripheral paralysis. Others, like Buhl, regard the origin of the paralysis as central and due to an apoplexy of certain spinal ganglia, or in some cases to a sudden congestion of gray matter in the spinal cord.

Jacobi, in his admirable treatise on diphtheria, takes the ground that as "it is characteristic of diphtheritic paralysis not to follow any certain course, passing by certain parts of the body and attacking others," the paralysis may be central in one case and peripheral in another.

Thus in a given case the throat may be the starting point for the paralysis, as well as affording ocular evidence of the point of primary infection. The fact that paralysis of the soft palate is of the most frequent occurrence would indicate that the local deposit in some way not yet satisfactorily explained, interferes with the nutrition of the local nerves and paralyzes them either by compression, inflammation or sepsis. It is more difficult to explain those cases of paralysis occurring in nerves remote from the pharynx and connected with it quite indirectly. For example: Paralysis of the power of accommodation of the ocular muscles stands second in the list of frequency of parts affected by post-diphtheritic paralysis.

Scheby-Buch collected in his clinique at Kiel, from 1862 to 1869, 38 cases of paralysis of the power of accommodation of the eye, of which 24 resulted from diphtheria. Of these 24 cases, 20 were diphtheritic affections of the throat, 2 of wounds, 1 each of vagina and skin. Adherents of the germ theory explain these cases by supposing that bacteria, starting from the point of infection, force their way through the various tissues or are carried by the blood until they reach the parts affected by the paralysis. But to this theory it is objected—and the objection seems valid—that the blood cannot transport these germs in a living or active state on account of its alkalinity (Jacobi: *Treatise on Diphtheria*, page 99) and that the germs are themselves not sufficiently vitalized to burrow through tissues and through the coats of the bloodvessels, and so affect nerves remote from their point of invasion. These explanations of the germ theorists fail to explain.

They are not in harmony with clinical experience nor with sound reasoning based thereon. They are unsatisfactory when accounting for the mild and transient cases, where only local nerves and parts are involved, and are still more unsatisfactory when brought face to face with more serious and extensive paralyses remote from the manifestation of the primary disease.

Where general paralysis supervenes, or where an entire upper or lower member is affected, the paralysis is seldom or never sudden, but on the contrary is gradual and insidious in its approach and progress. The color and temperature of the member and the gradual changes in its morphological elements show that nutrition is profoundly affected. Emaciation is more or less marked, but the fact that recovery in these cases—however bad they may be at a stated time—almost always takes place, leads me to believe that *there is not at any time an impairment of organism, but only a temporary loss or impairment of function.* This temporary impairment of nutrition is ultimately made good as convalescence is established, and I know of no cases where permanent lesion has been recorded.

The theory of ptomaines is equally unsatisfactory in accounting for the phenomena attending these cases.

If the circulating fluid is loaded with chemical poisons—no matter what their nature or origin—why should certain parts be affected and not others?

Why is it not more rational to suppose that the blood, depleted

of necessary nutritive elements by reason of the disease, fails to nourish these affected parts, because of their low assimilative power, a condition due to inherent defect or developmental weakness.

When a person—child or adult—is attacked by diphtheria it is attacked by an enemy having a certain amount of destructive force. On one side, in the resultant battle for life, we have the "*vis medicatrix naturæ*," and on the other the ambushed insidious enemy. All nutriment that is assimilable helps to sustain nature in the combat. Medicine furnishes a valuable, but uncertain, auxiliary or ally. The battle really hinges upon the inherent powers of the system, reinforced by such aids as are afforded by food and stimulation. The paralysis is an evidence either of precedent organic defect, or gives us notice that the general nutrition is wanting in some essential element presented to impoverished nerves in an assimilable form. I believe this to be true of mild cases, as well as of those which are more severe.

In those cases of sudden death, which are occasionally recorded and classified under the head of "heart failure," there is probably an organic defect in the heart structure rendering a sudden stoppage of the heart's action a mere matter of time, under any circumstances which would subject it to undue strain, such as would occur if the specific gravity of the blood, or alteration of its component elements, were to obtain.

When I started to prepare this paper I was under the impression that the views here stated regarding the nature of post-diphtheritic paralysis were, to some extent, original. I find, however, that many eminent authorities have reached a similar conclusion by different processes of reasoning.

For example, Dr. Abercrombie has examined the spinal cord in numerous fatal cases of diphtheria, and found no lesion which shed light upon the cause of death.

Dr. Roberts, in his "Practice of Medicine" says: "Whether diphtheritic paralysis depends on primary changes in the nerve-centres, or whether they are of a secondary nature, must be determined by future observations."

Dr. Davis, in his last edition of "Practice" (1884), says: "The paralysis following diphtheria, whether partial or complete, appears to be a simple loss of nerve force, or muscular contractility, and is

not accompanied by any inflammatory or febrile symptoms, or even local pain and soreness."

In this view of the case, post-diphtheritic paralysis is analogous to, or identical with, that general condition which we designate *neurasthenia*. It is a *quasi*, not a true paralysis. The affected parts are more sick than killed; more asleep than dead. They may be resuscitated by careful treatment, and in time brought into renewed activity. And this is entirely in accordance with clinical experience, as the following cases will show:

CASE I.—The first case of post-diphtheritic paralysis occurring in my practice was that of Dudley W., who was at the time seven years old. The diphtheria was typical in its character. The pharynx, velum palati, and uvula were covered with exudate. There was the usual depression of vital powers from the beginning, but it was not until the eighth day of his illness that he showed any alarming symptoms.

On this day I was sent for in haste, and found him breathing very slowly and irregularly. His pulse was very feeble and rapid, he was suffering no pain, but was indifferent to everything around him. To all appearance he was dying, and his parents and friends were so informed. For several days previously there had been some difficulty in articulation, but I had attributed it to the diphtheritic deposit, which was very great, and had evidently extended into the posterior nares.

There had also been occasional regurgitation of food, especially of liquids. I immediately gave him Nux vomica and Gelsemium at intervals of five minutes, and whiskey diluted with hot water was administered about as often. After an hour the heart's action became steadier, his respiration improved, his face became less pallid, and, indeed, all of the alarming symptoms gradually abated. Several times in the succeeding forty-eight hours he had sinking spells, during which his friends felt sure that he was dying.

Under the remedies above mentioned and heroic alcoholic stimulation he rallied, and ultimately made a complete recovery. It was a month or more, however, before he could articulate certain words so as to be understood, and for weeks he had a quick and irregular pulse.

In this case, as in the following one, recovery was undoubtedly due to the undisturbed action of the stomach, whereby nutrition was

sustained. The vitality was held up by stimulants and nutrients regularly administered, and I attribute the favorable results to this fact rather than to the medicines used.

The following interesting case has been kindly given me by my friend, Dr. Grosvenor, and it is inserted here in the doctor's own language:

"On January 1st, 1883, our little David, then just two years old, lay hopelessly ill with diphtheria; at least so thought the kind professional brothers who ministered with us to the little sufferer. Quite contrary to our expectations he gradually convalesced, owing largely, as we think, to the fact that he did not miss his meals during the entire illness. He had a gill of well-cooked oatmeal and a gill of milk in a bottle every four hours, not missing a single meal.

"But when convalescence was assured it seemed a calamity both to him and to us, for he was completely cross-eyed, the lower limbs were completely paralyzed, his will was gone. He seemed, in short, such a complete wreck that we could hardly rejoice in his recovery.

"After grieving over this state of things for some days I roused myself and said this must not be, and commenced in earnest to build him up, well-affiliated remedies seeming of little avail. I took him out with me on my daily rounds, keeping him constantly, or as much as possible, in the open air (fortunately he liked my coachman, who was a kindly and wholesome fellow). We fed him his oatmeal and milk every four hours, at the same time giving him a half teaspoonful of Hypophosphites (Fellows Syr.).

"In a few weeks his eyes commenced to straighten themselves, and he could utter some sounds. He spent the summer following on a New England farm near the coast, at his grandfather's, in company with his judicious and careful mother. While there he more completely recovered the use of his limbs, being then able to walk and run a little, though falling frequently.

"From that time his improvement was rapid, and eventually his recovery was complete, save the loss of a year's growth. Mentally, now at seven years, he is as bright and active as any boy of his age. He is a sturdy boy physically, and has had no severe illness since save measles. Occasionally a little trouble with his heart—not enough to cause alarm.

"Thanking you for your courtesy at that time and now, I am, dear sir, most truly and fraternally yours,

LEMUEL C. GROSVENOR."

Dr. Hale's Cases.

Dr. E. M. Hale, of Chicago, in answer to inquiries, writes me as follows:

"I have met with fifteen cases of paralysis of the glottis and contiguous tissues of more or less intensity following diphtheria. In no case was the paralysis complete. These I have cured with Gelsemium, Causticum, and Baptisia. Brom. pot. cured one.

"In paralysis affecting the eye I had two cases; one cured with Gels., the other with Spigelia.

"Several of my patients have died suddenly during convalescence, probably from cardiac paralysis.

"As prophylactive of this condition I advise absolute rest, and prescribe Digitalis and Strychnia in appreciable doses.

"One case of paralysis of the stomach died on the third day, of incessant vomiting."

Dr. Williams's Cases.

My friend, Dr. C. A. Williams, of Chicago, has kindly furnished me with the following cases from his private practice:

"During the past year I have had three cases—one of the heart, two of the tongue and throat. The first was a child eight years of age. The case was malignant from the start; did fairly well, and by the tenth day the membrane was cleared off from the throat, a little, however, remaining in the posterior nares. About the fourteenth day, while apparently as well as usual, he gave a sudden scream and gasped a few times. I placed my ear to the chest at once, and the heart did not beat after giving the scream. He was conscious up to the last moment. No. 2 was a lady fifty years old. The deposit invaded the larynx and, for some days after the fauces were clear, threatened suffocation. After a time it began to disintegrate, and was thrown off in large pieces, very tenacious and thick. In this case there was great difficulty in swallowing on account of strangulation; the tongue turned to one side when protruded, and many words she could not articulate for weeks after.

"No. 3.—The paralysis affected about the same parts as in case No. 2, though the diphtheritic deposit was confined to the fauces. Strychnine in some form has been the main remedy, and usually the arseniate, as in most cases paralysis has occurred when there was a low anæmic condition of the system. I should say that, as a rule,

complete recovery may be expected, though the time may vary from weeks to months. Often a change of climate is necessary. I have noticed that these sequelæ predominate in those cases which progress slowly, when the deposit is extensive and remains a long time, and when the system becomes thoroughly impregnated with the poison. The more fibrinous the deposit the greater the shock to the system and the tendency to paralysis.

Truly yours,

C. A. WILLIAMS."

In addition to the remedies already mentioned I know of one case where prompt improvement followed the use of Lachesis 200th.

Cactus grand. has given me such satisfactory results in several cases, where irregular heart action was a predominant symptom, that I should recommend its use where there is marked aberration of the heart's function.

If there is any one remedy, however, to be preferred to another, in cases which seem disposed to become chronic, I should name electricity as that remedy. I personally prefer the faradic current, applied daily to the affected parts at a séance lasting from five to ten minutes. It should be borne in mind always that, except in cases of sudden death from involvement of the pneumogastric, the natural tendency of these cases is toward spontaneous recovery.

Our treatment, therefore, should be more hygienic than medicinal, and all hygienic methods may be invoked with full confidence in hastening complete recovery.

Certain cases may require change of air; others may be benefited at home by massage, salt water frictions,—where limbs are affected—out-of-door exercise, and any and every means that will conduce to a better general state of health.

REMARKS ON THE REFLEX ORIGIN OF CERTAIN DISORDERS OF THE NERVOUS SYSTEM.

By Clarence Bartlett, M.D., Philadelphia, Pa.

When the writer of this communication graduated, in 1879, he became an omnivorous reader of the medical literature of the day. It was not long, therefore, before he knew of endless cases of epilepsy cured by circumcision, by removal of foreign bodies from the ear, by the extraction of carious and dead teeth, by the excision of cicatrices, by correction of errors of refraction, and by the cure of disorders of the alimentary canal. He read of cases of mental and nervous disorders in women promptly if not instantaneously cured by the repair of lacerated cervices and perinea, or by the replacement of prolapsed uteri, or by the corrections of versions or flexions of that organ. As time speeds on, the fashion changes, and now the writer finds that convulsions, chorea, paralysis, insanity and numerous other nervous disturbances are believed to have their *fons et origo* in disordered bowels or in insufficiency of the ocular muscles.

Thus did the writer establish within himself an abiding faith that many cases of nervous disease were reflex from local disorder, and that the removal of the source of irritation would be followed by a prompt cure of the nervous disease it had excited. Every case of epilepsy, chorea, and other nervous disorders in male children was carefully examined for genital irritation. Nervous disorders in women were referred to competent specialists for physical exploration, and eyes and ears of all cases in which any trouble with these organs was suspected were carefully examined and tested. What was the result? Although several cases of epilepsy and chorea were found in which redundant prepuce existed but without any evident local irritation, I have thus far failed to see a case of either of these affections in which circumcision effected an unquestionable cure. In cases of epilepsy a lessening of the number of fits in a given period

following the operation was noted; but then there came a time when improvement ceased and a relapse occurred. How is this to be explained? It has been my fortune to confirm the experience of many neurologists, that oftentimes epileptic fits cease temporarily during the course of acute diseases or after injuries or surgical operations. It is thus that I would explain the assertion of Hammond, that a number of times he has greatly benefited cases of epilepsy by trephining, though there was no evidence of either disease or injury at the seat of operation. Whether or not the improvement in these cases was permanent can only be ascertained by keeping them under observation for a period of three years or more.

While my experience respecting the value of circumcision in epilepsy has been negative in its results, I find numerous reports from others to the effect that they have cured not one, but several cases of this disease by this operation. I have always felt, however, that the manner of reporting these cases, was in most instances insufficient to carry conviction. The main faults with these reports have been that the precise local condition has been insufficiently described, the duration of the disease and the frequency of the attacks have not been mentioned, and the cases have been reported too soon after the operation. They are generally reported from one to three months afterwards, which is decidedly too soon, as no case of epilepsy can be said to have been cured until the patient has gone three years without a fit.

The same doubt that I would cast on circumcision as a cure for epilepsy, I would also apply to the removal of the ovaries in the case of female epileptics. I must confess that I have never yet read of a case where there was sufficient evidence to *prove* that the oöphorectomy produced a permanent cure. Yet many gynæcologists talk of oöphorectomy for epilepsy with as much indifference as they would the opening of an ordinary abscess.

A careful study of neurological works will show the reader that the authors exhibit no faith apparently in phimosis as a cause of epilepsy. Gowers, with his immense experience of over 1500 cases, failed to meet with a single instance in which epilepsy could be attributed to that deformity. The most that he will say, in speaking of circumcision, is that, in cases where masturbation is practiced, this operation will benefit the disease by aiding in the cure of that filthy habit. Other authors are no less pronounced in their opinions

on the same subject. Thus even Mitchell, Seguin, Gray, Mills and numerous others of note have never met with a case of epilepsy cured by the removal of genital irritation. Wharton Sinkler has met with one such case, which he reported about one year ago in the *Philadelphia Medical Times.* As the last-named physician has a dispensary with unlimited opportunities for the observation of nervous diseases, the fact that he has met with only the one case of epilepsy from genital irritation is significant of the rarity of such.

I have several times asked surgical friends if they had ever cured cases of epilepsy and other diseases by circumcision. Thus far they all admit complete failure so far as epilepsy is concerned. As regards nervous disorders of an indefinite character, the symptoms being such as to make it impossible for the physician to diagnose the case as one of the typical disease, I find that here circumcision has wrought numerous cures, both in the experience of others and myself.

As of epilepsy, so of chorea; I have yet failed to meet with a case cured by circumcision. I have met with instances where all symptoms ceased shortly after the operation. Inasmuch as the disease returned the following spring, I have felt that the so-called cure of the first attack was merely a spontaneous recovery without regard to the means adopted for the cure of the case.

There are, however, numerous choreiform disorders which may occur in childhood and which are readily curable by the removal of the peripheral irritation which is their exciting cause. Thus we may note blepharospasm cured by the correction of hypermetropia; facial twitchings from nasal catarrh or dental disease; restlessness of the legs from phimosis, etc. These cases, however, should not be classed as cases of chorea, with which disease they bear only a superficial resemblance.

As to reflex paralysis, I must say that I have had no experience with it. Neurological writers refer to it only as one of the possibilities. The cases reported from time to time in our journals, on careful investigation, prove to be cases of either diphtheritic paralysis or acute poliomyelitis anterior, both of which reach a certain stage when without treatment of any kind there is a recovery partial or complete. An operation undertaken at this time, of course, gets the credit of effecting the improvement.

Let me return to the subject of epilepsy once more for the purpose

of making a few remarks in relation to the diagnosis of the affection. It always happens that the first of a series of epileptic attacks occasions alarm in the patient's family. The physician is at once sent for. In the majority of cases the convulsion is attributed to some peripheral irritation. How shall we know whether such is the case or not? We must largely depend on the age of the child. As is well known to you all, children less than three years of age have very impressionable nervous systems. Prior to this age the onset of acute diseases, indigestion, worms, etc., may readily excite eclampsia. After this age such attacks become exceedingly uncommon. The longer the time that has elapsed since this age has been passed the more likely is the attack epileptic in character. This may even be so when there is a source of irritation, as disordered stomach, observable. I will not be contradicted when I say that epileptics are more readily affected by excitement or irritation than any others. It will therefore be readily understood that this irritation will far more readily exert visible effects in them than in others.

During the past few years it has become fashionable among certain specialists to attribute all or nearly all cases of epilepsy, chorea and other functional nervous diseases to eye-strain. My experience is directly opposed to this fashion. In one case in which glasses had been prescribed by one of my predecessors, the fits had remained away for a somewhat longer time than usual, but so they did after an operation for misplaced nasal septum, performed by another specialist. The special form of eye-strain on which great stress is laid, however, is that arising from insufficiency of the ocular muscles. That such insufficiency must frequently produce very distressing symptoms, we must all admit. That it will produce epilepsy or chorea, we must want better proof than has yet been afforded us. I have now examined a dozen or fifteen cases of epilepsy for muscular insufficiency, and have thus far failed in every case to detect any such difficulty. I am sorry that this is so, for epilepsy is undoubtedly very obstinate to treat, and any means so simple as tenotomy of ocular muscles would, if really valuable, be received with joy. That there *may* be cases dependent on the above cause we can, I think, admit; that such cases are common we cannot too positively deny.

In closing this paper I must refer to two incidents in my own experience which well illustrate the fallacies one may fall into when carried away with the subject of "reflex nervous disorders." The

first one was that of a woman mentally deranged. Her delusion was that by taking a certain nostrum her abdominal and pelvic viscera had all become displaced. A careful examination showed her to be in about her fourth month of pregnancy. There was no evidence of a lacerated cervix. About eight months after that she fell into the hands of a gynæcologist, who discovered cervical laceration and assured the family that the repair of the tear would cure her mental trouble. She finally recovered without an operation.

The second case was one of undoubted syphilitic brain disease, occasioning hemiplegia, in a young man of thirty years of age. While in the West he had had his rectum treated by a surgeon there, who attributed the trouble to disease of that organ. For a short time he improved under this treatment. Then a relapse followed. Further treatment was unavailing.

It is not to be concluded from the above that I deny the existence of reflex nervous disorders. Far from it; but I would say that reflex nervous diseases are only rarely met with, and that epilepsy, typical chorea and paralysis are especially rare from this cause. Valuable time is often lost in attributing a first epileptic attack to worms, thus permitting the early therapeutic measures, so necessary to successful treatment, to be disregarded. When nervous troubles are reflex in origin, the symptoms are generally of an indefinite character and in no wise characteristic of any special disease of the nervous system.

Discussion.

M. W. Van Denburg, M.D.: From an experience of some years, I am more and more inclining to the belief that these cases of post-diphtheritic paralysis tend to spontaneous recovery, and it is a question with me how much reliance may be placed on the results of therapeutical measures. Almost the last sentence read says these cases tend to spontaneous recovery. My faith in the treatment is just about *nil*, from the fact that I believe that they do tend to spontaneous recovery, when your drug is as little harmful as possible. I have had only one case of thorough post-diphtheritic paralysis; it was a case in which I was personally greatly interested. The attack followed over-exercise in a close room. A little lad about 5 or 6 years old had become overheated in a skating rink and gone out into the cold air. The next day he began to complain a little. I paid very little attention to him. The second day he complained of an ache in his head, but was about the house still; it was the third day

before I began to suspect anything, and then when I saw him there was a suspicious yellow watery fluid running from one nostril, and the other was closed. The membrane had developed so that it was perfectly visible in both nostrils externally, and down the pharynx, upon the velum and both sides, until it was on a level with the tongue. I think that the membrane was, during the progress of the case, thrown off once from the nostrils. It was certainly ten days that the nostrils were perfectly occluded. There was a little abrasion of the finger on one hand, and rubbing his face, as a child naturally would, a diphtheritic membrane was developed here also. He recovered from the deposit in about two weeks. There was sloughing without any doubt in the nostrils; they were packed so full when the membrane was thrown off. He was able during the whole sickness to raise himself up in bed, to take his remedies, to have the throat sprayed, to receive his nourishment, which he took regularly every two hours during the day and every four hours during the night. This was the case for ten days, because he would take rarely more than a teaspoonful at a time, though sometimes as much as a tablespoonful. At the end of about a week after the apparent recovery, he began to look cross-eyed and had difficulty in swallowing. At the end of two weeks after his apparent recovery, if he attempted to swallow anything solid, it would have to be poked backward into the throat with the finger, and he would have to throw his head back in order to facilitate swallowing. In the course of the next week paralysis of the arm and partial paralysis of the leg developed, this partial paralysis lasting for nearly two months. At a date which, as near as I can place it, was about seven weeks subsequent to the time of his leaving the bed after the first attack, he was out walking with me. I made him a wooden whistle, and trying it myself found it blew very easily, but he was unable to sound it; by closing the paralyzed side of his nose with his hand he was still not able to force enough air through the lips to make a sound; still he made a complete recovery. I used Nux vom. and Rhus, but I am to this day wholly unable to say that either one did any good. I think that the case tended to spontaneous recovery.

In regard to the paper of Dr. Bartlett, I would like to say that it h s become very fashionable to be very learned in pathological lesions. I think these are of very little use to us in cases that recover. How we are to know that there is a diphtheritic deposit on any part of the spinal cord, or draw any other inferences as to internal diphtheria, I do not see, except by post-mortem. It seems to me that the homœopathic law applied to these cases is of much greater value than the scalpel and the microscope.

G. C. McDermott, M.D.: I believe the doctor would have assisted his boy to a more speedy recovery if he had given him Gelsemium. I have seen six cases of this kind where there was this paralysis. In

such instances we find the throat and the eye paralyzed, their functions seriously impaired and apparently beyond restoration. I can speak of one such case of Dr. Howell's, in which a little girl had this paralysis; she not only could not see at the near point, but could not walk. She was fully restored inside of thirty days under Gelsemium 3d. If I had a case of bodily or general paralysis following this disease, I would give Conium maculatum. For difficulties with the eye and throat I know of nothing superior to Gelsemium, but, as already said, for paralysis beginning in the lower extremities and progressing upwards I know of nothing in our homœopathic materia medica that is more curative than Conium, and you may give it in any potency, provided it is the similimum.

Argentum nitricum is another remedy worthy of attention in cases of paralysis affecting the ciliary muscle or muscle of accommodation. It is particularly of service in the adult, and seems to be better indicated in aged persons. Gelsemium is particularly indicated when together we have the throat and eye suffering simultaneously.

Even strabismus is frequently noticed and one side of the body partially paralyzed.

R. F. Tousley, M.D.: I don't know that I understand fully what is meant by a natural tendency to recovery in disease. It seems to me we have no right to ignore the treatment of post-diphtheritic paralysis on the ground that it may recover spontaneously. This may be said with equal truth of typhoid fever, scarlet fever and of almost any disease which is not necessarily fatal. The fact that a certain percentage of diphtheria cases are followed by paralysis, and that the majority of these cases will recover without treatment, is not sufficient ground for ignoring the use of homœopathic remedies for their treatment. That those cases recover sooner with the aid of remedies than without is, I think, the experience of every physician that has made any extended observation in the treatment of cases with the homœopathic remedy; and those who have tested homœopathic remedies will bear me out in the assertion that those cases recover more quickly under such homœopathic treatment than they do without it. In regard to reflex influences, Dr. Bartlett seems to have placed very little reliance upon reflex influences as a factor in disease, and in my estimation he argues strongly against the spirit of his own paper. He admits, and cites for authority, cases where circumcision has interfered with epilepsy and other diseases, and whether it cured them or not it certainly has not been without benefit; certainly that is the strongest kind of argument in favor of reflex influences as a factor in producing *symptoms*. What constitutes disease? Not every person is afflicted with disease simply because of the disease-exciting influence itself. It is because there is a predisposing cause and an exciting cause. That exciting cause may be an elongated prepuce. It may be in phimosis, and that the operation of circumcision, or any

other operation, will relieve the symptoms, is the best proof in the world that that was an exciting cause. But in order to treat diseases intelligently you must remember that you often have a predisposing cause which you must also treat. The tendency of the day is to get on a hobby and ride it to death. I think it is only reasonable to suppose that a predisposing cause can bring about another exciting cause even after the original exciting cause has been removed. Nor do I believe it necessary to wait three years before reporting the cure of epilepsy if the predisposing cause has been found and removed.

C. D. CRANK, M.D.: The maximum frequency of diphtheria is between the third and sixth year. The maximum frequency of the *paralysis* is at a much later period. If the paralysis were due to nerve exhaustion, neurasthenia as claimed by Dr. Tooker, would we not find the paralysis predominating at an earlier period, at a time when the nervous system is more impressible, and less able to resist exhausting influences?

Dr. Tooker does not regard diphtheritic paralysis as differing from that accompanying measles, mumps, or febrile conditions generally—save in the name. I recognize *this* distinction,—paralysis of diphtheria always *follows*. I have no knowledge of the paralysis existing as a complication, or accompanying the attack. On the other hand the paralysis of measles, and many febrile conditions usually exist as a complication, an ACCOMPANYING condition.

My first study of diphtheritic paralysis was in a case about as follows: It presented the usual symptoms with exudation upon the tonsils and adjacent tissues. It pursued the usual course, and the man made a good recovery. Two weeks later he experienced difficulty in swallowing and in speaking. There was numbness of extremities ending in paralysis of lower limbs. About this time his wife, who had nursed him, came down. She had worn an issue on her arm for several years. The exudation made its appearance not in the throat, but upon the issue. About ten days after her recovery symptoms of paralysis were present, not in the arm, but like her husband, first in the throat, and extending to complete paralysis of the lower extremities.

Last winter I was called to care for a simple sore throat—follicular tonsillitis—as I regarded it. The prostration was so pronounced, however, that I watched the case with more than usual care. Ten days after recovery the little girl complained of difficulty in swallowing, but it passed without further trouble.

Before this symptom occurred, a younger brother came down with the same trouble and pursued about the same course. I suspected the presence of diphtheritic element, and found a loss of the knee-jerk. Two weeks after recovery, I was hastily called to the case to find marked cardiac trouble.

A younger brother in the meantime came down. In this case we

had no exudation upon the tonsils; no throat-symptoms at all, but marked physical prostration. Here, too, was absence of knee-jerk. Ten days after recovery the manifestations of paralysis were sufficient to alarm us all. It affected both the throat and the extremities.

The tendency to paralysis in these cases cannot be referred to peripheral lesions or irritations. Neither do I believe they were due to neurasthenia. They simply represent the nervous element in a *systemic* trouble.

Dr. Farrington gives us indications for two remedies which I have found of service in heart complications.

Gelsemium.—Feels as if the heart would cease to beat if he did not move about.

Digitalis.—Feels that the heart will cease to beat if he makes the least motion.

CLARENCE BARTLETT, M.D.: May I ask Dr. Tousley if he ever cured a case of epilepsy by circumcision?

DR. TOUSLEY: No, sir.

DR. BARTLETT: May I ask if any one here has cured a case?

DR. W. D. GENTRY: Yes, sir. The trouble had lasted seven years before the operation, and there has been no return of the trouble for three years past.

DR. BARTLETT: Has any other member cured such a case? (No answer.) This proves the point I wished to make, which was, not that phimosis may never be the cause of epilepsy, but that it is greatly overrated as the cause of such disorder.

The doctor misunderstood my point. He says I argue against myself, because I admit that these cases often recover temporarily after operation. Many of these cases will be temporarily relieved by any shock to the nervous system. You will find this in some cases of pregnancy in epileptics in which the paroxysms may disappear entirely during this period, while in other cases the spasms may be increased in number at such times. One of my cases of epilepsy was attacked with bronchitis and had no fits whatever during his illness. This same patient obtained temporary relief from the epilepsy after an operation for misplaced nasal septum by a nasal specialist.

It is the experience of surgeons that often when epileptics have met with an injury, fracture of the leg, for instance, the fits disappear for the time being, and it is very fortunate that this is so. The shock of injury seems to have a beneficial effect on the nervous system. Many of those cases which improve after circumcision do so on account of the operation or the shock of it, and would probably improve equally well from any operation. This is not my own observation but the experience of many. Dr. Stevens claims to take cases of epilepsy out of the Willard Asylum, cases of from ten to twenty years' duration, and cure them by relieving abnormalities of

refraction, muscular anomalies, etc. If my memory serves me right he reports these cases only one or two months after the cure has been made. He goes so far as to say that other physicians will find the same trouble that he does. I have examined a dozen or more epileptics according to Dr. Stevens's methods, and have yet to find a single case in which there was any form of muscular insufficiency mentioned by him. Drs. Noyes and Loring criticise his results very severely, and so do many neurologists. Barwell's results are those of one man only, and I do not know that I can explain them. If circumcision can cure hip disease it is certainly a very easy remedy for a very severe disease. Circumcision in the Children's Hospital in Philadelphia, has not cured a single case of epilepsy, chorea, or hip disease. Other surgeons give similar results. It is possible that such cases may occur, but they are rare.

MALCOM DILLS, M.D.: I would inquire of Dr. Crank, if he ever knew of a case of post-diphtheritic paralysis that did not recover?

DR. CRANK: I know of a case that has not recovered up to the present time, and probably never will. The case came to me early last winter. The child is gradually growing worse. At first there was no evidence of brain disturbance, but now there are symptoms of cerebral softening, and other complications.

Another case came to me not long since. Dr. McDermott examined the case with me. The child has been growing worse, and I see no reason to expect recovery save that the majority of cases do recover.

I would call attention to the statement of Dr. Ormes, that there is a rise of temperature from two to four degrees, shortly preceding the paralysis. I have never observed this febrile manifestation, but on the contrary have found a subnormal temperature both preceding and following the paralysis.

SHELDON LEAVITT, M.D.: I think too much emphasis has been put upon special operations for the cure of neuroses of various sorts. For instance, our friend, Dr. Pratt, of my own city, recommends, as you all know, the removal of certain pockets and fringes in the rectum for the cure of all sorts of nervous diseases. And many go so far as to believe that the presence of those pockets and fringes is the real cause of the trouble; merely because the speculum is introduced, those pockets and fringes taken way, and the sphincter ani thoroughly dilated—merely because as the result of that the case is benefited, or perhaps entirely relieved, they infer that the presence of those pockets and fringes was the real cause of the difficulty. I believe that that is a mistake. I don't deny that operations are many times followed by great benefit; in fact I have employed them myself in a goodly number of cases. But this nervous disturbance is not necessarily the result of these various local conditions. A young lady of nervous temperament was living in the third story of a flat building, and, during one night, the building took fire. She escaped, but at great

peril. She found her way down a dark stairway, and in her excitement and fright she made one turn too many, so that after reaching the ground-floor she went right on down into the basement. No one knew where she was, although she was missed by her friends and relatives; but after the fire had been subdued they found her insensible in the basement, lying in six inches of water. Fortunately, life was not extinct. She was taken out and attentively cared for for a number of days before she returned to consciousness. For a few hours she seemed to be in her right mind, and then she went off into a state of insanity. She got worse and worse under the care of her old-school physicians. Finally I was called to take charge of the case, and found her in a state of raving madness. It took three or four persons to manage her at all. She would have scarcely any clothing upon her, and would rush about the room as a mad woman would. At that time she had had no sleep whatever for a period of at least sixty hours. I felt very sure that any simple remedy which I might give her would not have a prompt and decided effect. I gave her with difficulty a hypodermic injection of morphia, half a grain, but it did not seem to alleviate her sufferings nor give her any sleep. The next morning I proposed to the relatives this operation of Pratt's. I felt, not that the condition of the rectum was the cause of this mental state, but that possibly the operation itself—the shock of the operation, as Dr. Bartlett has suggested, might have a favorable influence. I put her under the influence of an anæsthetic. I had made no examination of the rectum whatever. I introduced the speculum, and found the pockets, but no fringes. I found the pockets as you will find them probably in nine cases out of ten, if not in 99 out of 100. I thoroughly dilated the sphincter ani. I introduced the uterine dilator and dilated the cervix thoroughly.

The result of all this was that that night she slept like a child. Her recovery was progressive, and in five or six days' time she was apparently as sane as any one, and has so continued ever since. For at least three months past she has been visiting in Iowa and Montana, and I am told by her friends and relatives that she is perfectly sane and in the enjoyment of good health. Now it is very apparent that the condition of the rectum did not cause that mental alienation. I could not say to the friends that that was the cause, because it was not. And that is where we mistake; we attribute these diseased conditions to whatever we may remove. Phimosis is a normal condition in a vast majority of babies. You will find this constriction, I say, in the vast majority of cases. There is more or less adhesion even without its being absolutely abnormal; and merely because we do find this state, we are not justified in saying that that is absolutely the cause of the other conditions which we may find present in the boy.

J. C. Wood, M.D.: I do not think that any one of us would doubt for a moment that an irritation of the prepuce in a child will

cause various nervous symptoms in nervous patients. It has become a custom with me when called to a child that is unusually cross and peevish, and where no other cause can be found, to examine the prepuce, and in many instances I have found a great deal of irritation which, if removed, will quiet the child in a most remarkable manner. If this irritation is continued for a certain length of time, why may it not cause reflex disturbances sufficient to set up epilepsy? And if this is true, then the one point which I wish to make is, that it is very much easier to prevent epilepsy, or to prevent the various types of nervous phenomena ordinarily met with, than it is to cure them after actual lesions are once established. We know too well the power of habit upon the human organism. After epilepsy is once established, even though the cause be some reflex irritation, irreparable damage may have been done, and after the habit has been once established, the fits occur in spite of the removal of the exciting cause. The mental effect of operations of this kind I think we see very often in women, and during the last month I was called to see a young girl of this kind just approaching puberty. She had most violent hysterical paroxysms; the paroxysms were so severe that it required one or two attendants to keep her upon her bed. The physicians who were in attendance and who called me in counsel, thought it probable that a more serious lesion was present, and requested me to examine the clitoris; as all the evidence pointed to pure hysteria I extended my examination with much skepticism and found what has been called by some of our specialists an adherent clitoris. I tore up the adhesions and the result was a complete and perfect subsidence of the hysterical paroxysms. Who now, can say in a case of this kind, whether or not it was the release of the adherent clitoris, or the mental effect of the operation that brought relief? At any rate a temporary recovery was complete. In young male children I do not think that we can take into consideration the mental effect. There is no doubt whatever in my mind but that an accumulation of smegma under the foreskin will cause all sorts of irritation. In cases of this kind if the child is properly cared for and the parts kept clean, circumcision is not called for; but after adhesions have taken place, if your experience is similar to my own, you will find that the most decided result will follow either circumcision or dilatation and stretching of the parts.

C. B. Adams, M.D.: I want to speak of one case which will partially confirm Dr. Bartlett's idea in regard to epilepsy. I was called to see a young man about 18 years old who was in the habit of having epilepsy every few days. In one of these attacks he fell down stairs, broke the bones of one forearm and also the clavicle. After setting the broken parts there was no appearance of the epileptic convulsions for quite a long time. I kept track of him for some four or five months. The attacks afterwards recurred, although I can't tell you exactly what interval of time elapsed between the

breaking of the bones and the reappearance of the convulsions. It was evidently the effect of the shock that suspended the epilepsy. As to removing the prepuce of children, I have observed quite a large number of cases, and I have yet to see one where I believed circumcision to be of any benefit unless there was a decided irritation from accumulation of smegma so that inflammation is produced; then you may hope for some good result in circumcision. But as I say, I don't believe there would be any benefit except in such cases as I have mentioned; otherwise I consider it a pernicious practice and foolish.

In regard to post-diphtheritic paralysis there is one remedy which has served me better than any other, and which has not been mentioned here to-day, and that is Causticum. I think it is the best remedy. It will cure more cases than any one remedy that I know of. I don't know that I have any marked indication, other than diphtheritic paralysis. I give it in the third and sixth. I probably give it empirically.

DR. VAN DENBURG: Some of the members have evidently misunderstood me in relation to the action of homœopathic medication in post-diphtheritic paralysis. The question that is always in my mind, when such cases recover, as they usually do, is this: how are we to tell that the medicines have acted and cured the case? We are too prone to draw strong conclusions from the use of remedies. We should draw them much more carefully and not say that *post hoc* is *propter hoc*, simply because the cases get well under our remedies when we are not able to prove that the remedies have accomplished anything.

L. A. PHILLIPS, M.D.: This discussion seems to me to have demonstrated the inadvisability of mixing up half-a-dozen papers in our discussions. In regard to post-diphtheritic paralysis I want to say a few words. The question of whether malnutrition is a cause, or a direct producing agent of the paralysis, which has been touched upon by one speaker, seems to me to be worthy of consideration. I have had little experience, and from the few cases I have had of this kind could not claim from personal observation to give evidence of a fact in this direction; but I believe that in no case, where the depression is slight, even though the deposit of membrane may be considerable, are we likely to have paralytic symptoms following; but where the general effects are manifestly serious—where the systemic effects are marked—then the danger of paralysis is increased. In cases of this kind I think the nutrition has been so seriously interfered with that the nerves, later on, manifest its effect. If this is true then I deem it important to call attention to the maintenance of nutrition and the stimulation of the system, if necessary, in order to avert and prevent the paralytic troubles which may follow. I think this is the direction in which we should make some study, and not pass it off as a disease of the nervous system, for I believe it is

not, but merely a malnutrition, a lack of power from a lack of nourishment which has taken place during the progress of the disease.

C. S. HOAG, M.D.: I recollect the case of a lawyer, a man of about 45 years of age, who had three children sick with diphtheria, not under my treatment, however. Successively all three died. I was called to the last case and in about the middle of the sickness. I also found the father sick with the disease. He had been standing over two of the children from the beginning to the end of the malady; had been their nurse and attendant throughout; but during the sickness of the third he was taken ill. Still from the time of the invasion to the close of his attack he was not sick enough to be in bed. He had as thorough manifestations in regard to the membrane as any one could have; yet he recovered and went about his business. After he had been at his work about three days, on returning home one day, he found he could go no further. Attributing it to being tired, he called a carriage and was taken home. The next day he attempted to go to the office. When he got part way there, he couldn't go any further; said he was tired, and was taken home. The third day he again got out of his bed, and again failed to get to his office. From this time on, his condition of "tired" advanced to a thorough and complete paralysis of almost every muscle of the body. He couldn't move a finger, foot, or toe. He had almost paralysis of the eyelids. This lasted him, from the beginning to the entire disappearance, about three years. Most of this time he had no treatment. He was advised by a friend of his, a physician, that it was no use, and not caring to go to the material expense, he took the advice and had no treatment. After six or eight months he began to have a little motion of the fore-fingers. He could move the fore-finger perhaps a half-an-inch slowly. His improvement increased very gradually. After three years there was complete recovery, and as already stated, there was almost no treatment during this period. The point in the case to me is whether the severe strain upon the nervous system; the shock following the care and subsequent death of his children, all dying within the space of one week or ten days, whether this did not precipitate the paralysis. Certainly his disease did not manifest itself as severely as it did in his children: that is, he was not prostrated, nor was he sick abed. In another case of three children sick with this disease, the paralysis showed itself in the form of double vision. There was no rise of temperature in either of these cases preceding the paralysis.

There is one division of the subject and the most of the work done by the writers of the papers has been upon that subject, namely, *Infantile spinal paralysis.* Of that subject I hope to hear more before this discussion closes. I have been very much tried by one or two cases of that disease. I hope to hear discussion on this topic, and especially as to treatment.

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JANE K. CULVER, M.D.: I believe the severity of diseases of children in nearly all cases might be greatly modified, and the terrible sequelæ of diphtheria and scarlet fever be prevented, if proper attention were given to nourishment in the first stages. We often find, in answer to our questions, "How has this child been feeding? What has been the character of its food? When was it last fed?" etc., that, since the invasion of the disease, and perhaps for many

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H. K. BENNETT, M.D.: Dr. Hoag has made a suggestion worthy of being emphasized, in relation to the paralysis following mild as well as serious cases of diphtheria. I think we are as liable to have paralysis follow in mild as in most severe cases, and that nutrition has a great deal to do with these cases. You will, of course, find that the patients have refused to take nourishment during these times, owing to the soreness of the parts and the inability to swallow: hence they are apt to be sadly reduced for want of proper nourishment. I attended a girl with a large abrasion on the back of the hand, and three days afterwards there appeared upon the abrasion a distinct membrane of diphtheritic nature, which remained there a long time. In regard to spontaneous recovery of cases of post-diphtheritic paralysis I want to say that I don't believe in it. It is true that a few cases do get well without medicine; but there are a great many cases that do not. I have been unfortunate, perhaps. I have had some three or four fatal cases of post-diphtheritic paralysis, and these cases followed mild, as well as severe attacks of diphtheria. A little boy of seven years was taken with a mild form of diphtheria; the deposit did not remain in the throat more than two days. The child was able to be about all the time; he did not take his bed and the appearance of the child was such as to lead one to believe that convalescence was thoroughly established and attention was withdrawn. About four o'clock, one afternoon of the second week, I was sent for hastily, and when I arrived it was too late. The child was dead. It was a case of paralysis of the heart. Another case was that of a young man about eighteen years old who had one of the most severe attacks of diphtheria I ever saw. It ran for two weeks before the membrane disappeared from the throat and he seemed to be doing well. I believed it prudent to stimulate him and did so; but notwithstanding the best treatment I could give him the young man died from paralysis of the lungs. Usually the first symptom of the approach of post-diphtheritic paralysis is paresis of the accommodation, and the attending physician should repeatedly test the vision and ascertain if the accommodation is in the least impaired. As soon as the first symptom of paresis of the accommodation occurs our post-diphtheritic remedies should be immediately used. Rest is as important as nutrition and even mild cases should be kept in bed. I believe that in Dr. Hoag's case rest contributed as much, if not more, to the recovery of the patient than the remedies administered.

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C. S. HOAG, M.D.: I recollect the case of a lawyer, a man of about 45 years of age, who had three children sick with diphtheria, not under my treatment, however. Successively all three died. I was called to the last case and in about the middle of the sickness. I also found the father sick with the disease. He had been standing over two of the children from the beginning to the end of the malady; had been their nurse and attendant throughout; but during the sickness of the third he was taken ill. Still from the time of the invasion to the close of his attack he was not sick enough to be in bed. He had as thorough manifestations in regard to the membrane as any one could have; yet he recovered and went about his business. After he had been at his work about three days, on returning home one day, he found he could go no further. Attributing it to being tired, he called a carriage and was taken home. The next day he attempted to go to the office. When he got part way there, he couldn't go any further; said he was tired, and was taken home. The third day he again got out of his bed, and again failed to get to his office. From this time on, his condition of "tired" advanced to a thorough and complete paralysis of almost every muscle of the body. He couldn't move a finger, foot, or toe. He had almost paralysis of the eyelids. This lasted him, from the beginning to the entire disappearance, about three years. Most of this time he had no treatment. He was advised by a friend of his, a physician, that it was no use, and not caring to go to the material expense, he took the advice and had no treatment. After six or eight months he began to have a little motion of the fore-fingers. He could move the fore-finger perhaps a half-an-inch slowly. His improvement increased very gradually. After three years there was complete recovery, and as already stated, there was almost no treatment during this period. The point in the case to me is whether the severe strain upon the nervous system; the shock following the care and subsequent death of his children, all dying within the space of one week or ten days, whether this did not precipitate the paralysis. Certainly his disease did not manifest itself as severely as it did in his children: that is, he was not prostrated, nor was he sick abed. In another case of three children sick with this disease, the paralysis showed itself in the form of double vision. There was no rise of temperature in either of these cases preceding the paralysis.

There is one division of the subject and the most of the work done by the writers of the papers has been upon that subject, namely, *Infantile spinal paralysis.* Of that subject I hope to hear more before this discussion closes. I have been very much tried by one or two cases of that disease. I hope to hear discussion on this topic, and especially as to treatment.

H. K. BENNETT, M.D.: Dr. Hoag has made a suggestion worthy of being emphasized, in relation to the paralysis following mild as well as serious cases of diphtheria. I think we are as liable to have paralysis follow in mild as in most severe cases, and that nutrition has a great deal to do with these cases. You will, of course, find that the patients have refused to take nourishment during these times, owing to the soreness of the parts and the inability to swallow: hence they are apt to be sadly reduced for want of proper nourishment. I attended a girl with a large abrasion on the back of the hand, and three days afterwards there appeared upon the abrasion a distinct membrane of diphtheritic nature, which remained there a long time. In regard to spontaneous recovery of cases of post-diphtheritic paralysis I want to say that I don't believe in it. It is true that a few cases do get well without medicine; but there are a great many cases that do not. I have been unfortunate, perhaps. I have had some three or four fatal cases of post-diphtheritic paralysis, and these cases followed mild, as well as severe attacks of diphtheria. A little boy of seven years was taken with a mild form of diphtheria; the deposit did not remain in the throat more than two days. The child was able to be about all the time; he did not take his bed and the appearance of the child was such as to lead one to believe that convalescence was thoroughly established and attention was withdrawn. About four o'clock, one afternoon of the second week, I was sent for hastily, and when I arrived it was too late. The child was dead. It was a case of paralysis of the heart. Another case was that of a young man about eighteen years old who had one of the most severe attacks of diphtheria I ever saw. It ran for two weeks before the membrane disappeared from the throat and he seemed to be doing well. I believed it prudent to stimulate him and did so; but notwithstanding the best treatment I could give him the young man died from paralysis of the lungs. Usually the first symptom of the approach of post-diphtheritic paralysis is paresis of the accommodation, and the attending physician should repeatedly test the vision and ascertain if the accommodation is in the least impaired. As soon as the first symptom of paresis of the accommodation occurs our post-diphtheritic remedies should be immediately used. Rest is as important as nutrition and even mild cases should be kept in bed. I believe that in Dr. Hoag's case rest contributed as much, if not more, to the recovery of the patient than the remedies administered.

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SAYER HASBROUCK, M.D.: I am glad that Dr. Lewis has brought this subject before us. I do not go to the extreme that Stevens would. It is a subject that warrants our attention. When to stop treatment and to operate, is a question that Dr. Stevens has not settled. It seems to me that we, who are just commencing to look at cases of that nature, should move slowly. I have seen cases, with the system below par, develop anomalies of the muscles, and after they got well of their constitutional trouble, the condition of the muscles improves. Often glasses and prisms will relieve. I think it is better to try with prisms and with all other methods before operating, because so far, no one has been able to operate without failures. I hope that in the future we will be able to tell when to operate and how to operate. At present, this matter is in its infancy.

HAROLD WILSON, M.D.: As I understand the condition of hyperphoria, it is not necessarily a condition of weakness, but one of congenital malposition of the ocular muscles by which a tendency to deviation is created.

In regard to Dr. Lewis's paper, we know that we may examine many cases of apparently healthy persons and find a deviation of one or two degrees. I do not think that because they have those conditions and no apparent resultant trouble, there is necessarily no relation between hyperphoria and general neuroses. I do think that if many such cases, occurring in young persons, were followed up for some time, and especially if there were much use of the eyes, there would be trouble resulting. Sometime in the history of that individual he would suffer from this heterophoria. I do not see the advisability of not operating and resorting to medicine if an operation will cure more satisfactorily. For my own part, I think the first thing is to secure the welfare of the patient. I have no prejudice against operating or in favor of remedies, therefore, if an operation promises better results, sentiment would not lead me to shrink from it.

J. C. MORGAN, M.D.: I would ask Dr. Lewis to recall that not alone in heterophoria, but also in cases of astigmatism with axes in an oblique direction, the patients, in order to get a better outline of the object, will bring the head into the best meridian for seeing clearly. Some years since, I noticed this habit gaining on myself. On having my eyes thoroughly examined, I found them astigmatic, and the proper glasses corrected the trouble.

As regards the effects of drugs in such cases, Dr. Woodyatt, of Chicago, long ago told us of Lilium tig. I have lately examined a certain lady with a myopic double astigmatism of about 40 in the horizontal meridian. Yet after three weeks' use of Lilium tigrinum 3x, followed by Sac. lac., this had been diminished by three-fourths of its original amount.

I think we have abundant reason to believe that not all cases are wholly congenital. Flexions of the cornea may be compared with those of the uterus. The curvature of the cornea is necessarily influenced by muscular action, intrinsic and extrinsic, especially when softened by irritative states, and when the eye is undergoing excessive strain, often sufficiently to alter the shape and produce astigmatism. This you may cure by medicines; *Argentum nitricum* is also worthy of study here, as pointed out by Dr. Woodyatt.

One of the essayists has referred to fifty cases of chorea whose refraction was examined, all of whom were found to have refractive error. Nearly all persons have refractive errors of some kind. Only one-tenth of the people are free from such at birth; and unless the choreic cases were *worse than the average*, in this respect, the coincidence would be unimportant; nevertheless, the cure of nervous diseases calls for the correction of every source of irritation whatsoever, including refractive errors of the eyes, and phimosis as well.

CLITUS S. HOAG, M.D.: I myself am an illustration of Dr. Morgan's remarks. I formerly held my head to one side, but have abandoned that habit since my astigmatism has been corrected with suitable glasses.

A. B. NORTON, M.D.: It sometimes happens that a heterophoria can only be detected after a long time and frequent testings. I have found that the use of Atropine will develop it.

F. PARK LEWIS, M.D.: In answer to the objection raised by Dr. Norton, I would state that in a certain proportion of cases congenital differences exist in the corresponding plane of the eye. As refractive inequalities are not uncommon, the attachments of the muscles may differ in the two eyes. Under such conditions no amount of exercise with prisms or medicinal treatment can have a permanent effect on the insufficient muscle. The opprobrium which has rested upon the surgery of the eye-muscles has arisen either from the fact that unsuitable cases have been chosen for operation, or the tenotomy has been unskilfully performed. If the tenotomy be performed when the insufficiency is asthenic, and not due to congenital malpositions, the renewal of health with the return of strength to the muscle, introduces complications which are not easily corrected.

To Dr. Morgan I would say, that I have already explained in my paper the various forms of heterophoria. I have noticed characteristic indications of hyperphoria. The two sides of the face are frequently unequal, and one of the most common indications of congenital difference in the height of the planes of the eyes is the way in which the patient carries the head, *i.e.*, slightly inclined to one side. This is often so slight as to be either unnoticed or looked upon as a habit. I may say that I should never make an ordinary tenotomy in any case of hyperphoria, and it was only after seeing Stevens operate that I felt at all warranted in performing the operation myself.

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In answer to a question of Dr. Bennet, Dr. Norton continued: I have prisms of various degrees set in spectacle frames and have the patient come to my office two or three times a week, first using prisms just sufficient to cause diplopia when looking at a lighted candle fifteen feet away; after fusing the images, increase the strength of the prism one or two degrees and so on as high as they can go. Each sitting lasts about 15 minutes.

In regard to what Dr. Wilson has stated, I should have said that there is not a proper balance between the muscles, because we cannot say positively that one muscle is strong or that the other is weak, but simply that the relative balance is lost. It is difficult to state what the normal strength of the ocular muscles should be; for example, our text-books have given the normal strength of the internal rectus muscle to be from 18° to 30°, whereas I have seen many cases in which the normal strength was 70°, that is, *only* when the internal rectus muscle was strong enough to overcome a prism of 70° would the *relative balance* between the inner and outer muscles be maintained.

The function of the ocular muscles is to maintain a proper adjustment or balance of the eyes, and if either muscle is a trifle too strong or too weak, then heterophoria exists.

H. K. BENNETT, M.D.: The reason why I asked Dr. Norton this question was because there seems to be a difference among oculists as to whether we should tenotomize a muscle or whether we shall correct the trouble by prisms.

There is one point which Dr. Lewis has mentioned which I would desire information about. When we tenotomize the internal rectus, it is the rule to cut it entire. In the case of an operation where only a few fibres are severed, as in the operations of Stevens, is there not a liability of deviation afterwards as great as it was before? I feel, therefore, that these operations may amount to nothing, judging

stronger, and by the 13th of April the exophoria had entirely disappeared. The glasses could then be used with perfect comfort, the nervous symptoms have now almost entirely gone, and the general health is better than it has been in years.

Mrs. N., of this city, aged 38, has been a confirmed neurotic for years; has worn lenses for hypermetropic astigmatism which I had myself prescribed ten years before. With the glasses her *vision* was perfect. Has, nevertheless, had difficulty in using the eyes for five minutes at a time. The following have been among her more prominent symptoms: Incessant pain in back of neck at the base of the brain; sensation as if ice-cold water were being poured over the head; ringing and rushing sound in the ears, with beating and pounding in the head sufficient to almost drown the sound of her own voice; most intractable insomnia for one entire month, getting no sleep excepting by the use of strong doses of opium and chloral; catching of breath and gasping as if she could never breathe again; excessive palpitation of the heart, so as to jar the whole body and prevent her from climbing an ordinary flight of stairs without stopping several times to rest, but *without any organic heart lesions;* a sudden noise would startle her so that she would tremble for half an hour; a fluttering and sensation of weakness in the abdomen which could only be controlled by wearing a tight bandage; great pain in back, bearing-down sensation, with aching extending to the knees. Her physician diagnosed a passive congestion of the uterus, which he considered dependent upon a depressed nervous condition. She had also numberless other nervous symptoms which would apparently quite warrant this diagnosis. An examination of her eyes developed the fact that there was a difference in height of the planes of the eye of 1° (right hyperphoria) with a turning inward (lateral esophoria) of 3°. A tenotomy of the superior rectus lowered the right eye the necessary 1° and subsequently two tenotomies relaxed the left internal rectus 3°. The result was a complete and almost immediate relief of every one of the nervous symptoms.

Other similar records might be transcribed, but it is needless to multiply cases of this kind. Enough has already been said to demonstrate, beyond question, that no case of functional nervous disease, no matter how profound its nature, can be pronounced incurable until it has been conclusively proven that the eye muscles

are properly adjusted, and that, in short, the eyes are optically and organically perfect.

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Harold Wilson, M.D.: I have read the discussion referred to by Dr. Bennett, in *Le Progrès Medical*. There was no unanimity of opinion. I myself am in favor of evisceration of the eyeball rather than enucleation, because by this operation the orbital tissues are less involved and there is therefore less opportunity for septic matter to work its way back. I have used for this operation Graefe's spoon, and can recommend it highly.

J. C. Morgan, M.D.: In relation to this form of inflammation, irido-cyclitis, I may say that I have had some encouragement in its early treatment with *Ferrum phos.*

After the disease had passed this stage I should expect better results from *Kali mur.*, after which I would think of *Kali sulph.*, or other drugs according to indication; I regard these and others of Schüssler's remedies as particularly valuable in the treatment of both the eye and ear.

ACUTE SERO-HEMORRHAGIC INFLAMMATION OF THE MIDDLE EAR.

By Charles Deady, M.D., New York, N. Y.

The object of this paper is to direct attention to a form of disease which, in the experience of the writer, is of a considerably greater degree of importance than would be inferred from the references to it found in the text-books.

The sero-hemorrhagic variety of acute otitis, is usually spoken of as a sort of side-show to the usual forms of the disease, and receives very little consideration as a special variety; some authorities do not even mention it and others dismiss it with the simple announcement that such a pathological condition sometimes obtains, but place no particular stress upon the fact.

The disease is comparatively rare, only a few cases having come under the observation of the writer in a hospital and private practice of about twelve years, but each case which he has personally treated has given him a sufficient amount of trouble and worry to enable him to keep it in mind without any great effort.

The disease seems to appear in patients who are somewhat run down, either temporarily so, or from some defect in the general health. Granted this condition and the causes and manner of onset are the same as those obtaining in otitis med. cat. acuta in a severe form, or in acute suppuration. There is severe pain, not only in the ear but sometimes extending over the whole side of the head, much tenderness to pressure, especially over the tragus; the drum membrane is first congested and afterwards bulging, and of a peculiar red which is due not only to congestion of the membrane itself, but to the sanguineous contents of the tympanic cavity.

When we see such a case we can safely say to the patient that not only will the pain not cease with the rupture or puncture of the drumhead, but in all probability it will considerably increase; this has

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ACUTE INFLAMMATION OF THE CORNEA AND CONJUNCTIVA.—RESULTS AND TREATMENT.

By Bushrod W. James, M.D., Philadelphia, Pa.

These external diseases of the eye, which occur frequently, are not without deep interest to the general practitioner.

Corneitis, or Keratitis, is an inflammation of that transparent structure, the cornea, on the maintenance of whose perfect clearness so much importance attaches in securing normal acuteness of vision. The cornea being composed of five different layers, the inflammations in them have a varied ætiology and pathology. When traumatic in origin, the inflammation is usually mild, and the healing proves speedy if the system is in a good healthy condition, but generally it is the result of a depraved state of the system, and then we soon have a disposition to ulceration, a result that almost invariably leaves an opacity, when healed, extending over the area involved by this process. The inflammation may be superficial, involving only the epithelial layers, circumscribed in the form of a small ulcer, or it may be interstitial, involving the parenchyma, causing a diffuse cloudiness to remain on recovery; or it may extend through the layers in such a manner as to cause a flow of pus into the anterior chamber of the eye, thus causing a serious complication with the inflammation. The several varieties are marked by vascularization and cell-proliferation, giving rise to opacity of the corneal tissues, and, consequently by the partial or complete interference with vision.

In children we most frequently meet with this variety, known as keratitis ulcerosa, having usually associated with it a constitutional dyscrasia, either as its originating cause, or as a complicating factor in the attack. The ulcers are generally central in location. If they go on to resolution without perforation, they leave an opacity, which, on account of its position in the direct line of the visual axis, inter-

feres more or less with good vision. If perforation should occur there is commonly a prolapse of the iris through the corneal aperture, giving rise to what is known as leucoma adherens, which is generally followed by staphyloma, or bulging of the cornea, which likewise interferes greatly with normal refraction and acute vision.

In severe cases the lens and vitreous may escape through the corneal perforation, causing a collapse of the eyeball, which will be followed by phthisis bulbi or atrophy of the globe. Another common form of keratitis, met with frequently in children, is the variety termed *keratitis phlyctenularis*. It consists of small vesicles, which involve the superficial layers of the cornea, having a leash of vesicles running up to them. The vesicles, as a rule, break down, forming small ulcers which heal, leaving small spots of opacity.

Keratitis parenchymatosa is an inflammation of the middle or deeper layer of the cornea, giving as a result on restoration a dull ground-glass appearance, and, although sometimes apparently unnoticeable, yet it seriously impairs vision. It is a slow form of inflammation, frequently due to a specific dyscrasia. The inflammatory products in the corneal tissue may, during such an attack, break down into pus, giving rise to *suppurative keratitis*, either circumscribed as an abscess or ulcer, or it may be diffuse, converting the cornea into a suppurating necrosed mass.

Treatment consists in the use of mydriatics if the inflammation is central, and myotics if peripheral, protecting the eye from light and dust, and then making use of the suitable internal remedy, which may in the earlier stages of the inflammation be one calculated to control the acute symptoms, such as Aconitum nap., Arsenicum, Belladonna, or Gelsemium. But frequently the remedy will need to be selected to reach the constitutional vice which is the primary cause of the local disease. The inflammations of the conjunctiva are designated according to their variety and ætiology. The commonest and mildest form is the *catarrhal*. This may be due to exposure to cold, traumatic or chemical irritants, to the strain of the eye produced by errors of refraction, etc. In this latter variety there will be an increased secretion of mucus, and when the inflammation is more severe, the secretion becomes purulent or muco-purulent, and then we have the *purulent conjunctivitis*. This variety may occur where many persons are living in close quarters, such as in institutions and barracks. It is communicated by contact of the discharge

from one eye to another, or in other local ways. This is the form which usually occurs among new-born infants, and is called *ophthalmia neonatorum.*

Gonorrhœal conjunctivitis is a purulent form of inflammation, and only differs from those above mentioned in the matter of its origin.

The danger of purulent conjunctivitis is loss of vitality of the cornea on account of interference with the nutrition; ulceration or corneal necrosis frequently resulting.

Phlyctenular conjunctivitis is of a similar nature to the phlyctenular keratitis. It occurs in weak debilitated subjects, and is sometimes periodical, recurring every few weeks in some cases.

Granular conjunctivitis, or trachoma, is somewhat of a contagious form of conjunctivitis, and is characterized by the formation of neoplasms in the conjunctival tissues, which are commonly spoken of as granules. These rough hard bodies, mostly situated in the upper palpebral conjunctiva, give rise by their friction over the delicate sensitive structures to a roughness and vascularity of the cornea, called pannus.

Follicular conjunctivitis is a form having distinct bodies, which are caused by enlargement of the conjunctival follicles.

In diphtheria occasionally the diphtheritic membrane will appear in swollen masses on the palpebral conjunctiva. This is a violent and dangerous form of inflammation to the eye known as *diphtheritic conjunctivitis.*

The treatment of conjunctivitis consists in the application of the suitable remedy, homœopathically selected, and possibly in some few cases, locally, of astringent collyria. Cleanliness is particularly needed, and especially in the purulent form. The discharge should be thoroughly disinfected and frequently removed, and disinfectant applications also made at short intervals, and then also the administration of the suitable remedy, and this will greatly depend upon the variety and ætiology of the conjunctivitis and symptoms present.

TREATMENT OF OCULAR CONJUNCTIVITIS BY ASTRINGENTS; AND RESULTS.

By H. C. French, M.D., San Francisco, Cal.

It is a pleasure to be able to compare notes with my professional brethren upon the results of our efforts to combat a malady so common as that of ocular conjunctivitis. From close observation as a specialist, extending over the past twelve years, I am constrained to believe that in few other diseases does personal idiosyncrasy play so important a part in the selection of remedial agents as in the choice of local applications for ocular conjunctivitis, and so variable have been the results of the use of a given remedy in cases presenting identical subjective and objective pictures, that I have sometimes thought that with our admirable materia medica from which to select, and the law of similia as a guide to the remedy, we are hardly justified in the use of *any* topical agents in *simple* conjunctivitis. However, I have not found a remedy which I dared to substitute for the local use of Argent. nit. in *ophthalmia neonatorum* and *purulent* conjunctivitis with its characteristics. In my college clinic, which is sometimes large, I have tried treatment of simple conjunctivitis with astringents alone, with internal remedies alone, and by the two methods combined, and am forced to believe that the most permanent and rapid results accrued from the careful selection and use of internal remedies only. Our brethren of the "old school" speak of the benefits of the astringent method in the most positive terms, because they have tried no other, not even the "no-treatment plan," which, if faithfully followed, side by side with the excessive use of astringents, would materially dwarf their enthusiasm.

My experience has led me to the following conclusions: 1st. That the general value of astringents in ocular conjunctivitis has been greatly overestimated by all schools of medicine. 2dly. That many cases of trachoma, sclerosis, and disorganization of the conjunctiva

and adjacent structures, have resulted from abuse of astringents in simple conjunctivitis. 3dly. That we have no data by which to determine what particular cases may tolerate and struggle to a recovery under astringents, and which be converted into chronic and incurable diseases.

Do not let me be understood as making no distinction between the evils of blue-stone and the milder astringents; but the question in my mind is, whether in a great majority of cases *any* astringent does not result in more harm than good? What say my brethren?

COMPLICATED CASES WITH SUGGESTIONS.

By A. M. Cushing, M.D., Springfield, Mass.

Mr. ——, 69; had acute conjunctivitis, also a pterygium, of many months' standing, which covered more than one-third of the eye and had nearly destroyed the use of it. The inflammatory condition of the eye and pterygium was soon relieved, which left the pterygium with a dull gray appearance. For this he received Thuya, more especially because I had cured other cases with this remedy. He took one dose a day till it showed slight indications of disappearing; then an occasional dose. He was a teamster, being obliged to be out in all kinds of weather, but in one year nothing except what appeared like small white threads could be seen and the sight was good. Of course his age delayed the cure.

Mrs. W., 67; had acute conjunctivitis, complicated with partial closure of both lachrymal ducts, the tears constantly running down over her cheeks. The ducts had been probed twice a week for months without benefit. The acute trouble was soon relieved. Later she received the Cal. carb. and Silicea, and in a few weeks the trouble disappeared. She also had deafness and perforation of both ears; unable to hear loud conversation. She had been taught to roll a bit of cotton, place it in the left ear, stand near a clock and with a little

stick move the cotton till it covered the perforation so she could hear the clock tick. Then she could hear ordinary conversation when directed to her. There had been a purulent discharge from the right ear for twenty-four years, but it entirely ceased under the influence of the above remedies.

I wish to call your attention to an unused remedy, that has a peculiar effect upon the eye, and that is Mephites. From my boyhood days I have been told that when applied locally "it is as bad as fire." A gentleman told me he was looking for a skunk, and looked under a bush to see if it was there; and it was, and it proceeded at once to blind the gentleman, which it did effectually. He said, as soon as the perfume entered the eye, it was as bad as fire, and he was blind for some time; but the most wonderful thing was, that when he recovered his sight he could with the unaided eye see and count the panes of glass in a house said to be two miles away, and it was certainly more than one mile away. If some of our scientific members can invent a way of deodorizing this remedy so it may be brought into use, it may assist the microscope to reveal yet another attenuation.

Recently, during my office hours, I was called to see a boy aged fourteen, who had been suffering severely three days with otalgia. I sent Mullein oil (pure) to put into the ear, and gave no medicine. One hour later I found him asleep, and he had no more pain. Some days later he had a similar attack with the other ear. Same remedy cured at once, and no more trouble.

Mrs. ——, 34; had been very dangerously sick with measles; had pain in left ear. Mullein oil relieved the pain whenever it appeared for two days, when an abscess broke and discharged profusely. Three days later another abscess formed in same ear, but the remedy did but little or no good. Cypripedium tincture in water did some good.

OTITIS AND FRONTAL HEADACHE.

By John C. Morgan, M.D., Philadelphia, Pa.

We have, all of us, become familiar with headaches due to anomalies of refraction and accommodation of the *eyes;* and we know how to appreciate the warning of danger given by a dull semilateral pain in the head, emanating from an inflamed and, particularly, a suppurating ear; but few of us, I think, ever suspect the origin of persistent and distressing pains in the *anterior* region of the head, in obscure and even unsuspected inflammation of the latter organ. A recent case has proved itself, therefore, quite a revelation to myself.

Lemuel P., a lad of 14 years, complained every morning of frontal headache, involving the eyes; appetite poor; aversion to study. An eye-test proved him absolutely emmetropic; I may say, much to my surprise. He received during many weeks, *Gelsem.* 3x, *Pulsat.* 2c, *Ignatia* 2c, with negative results—or rather, the headache steadily grew worse and he lost flesh.

One day he explained that on rising from bed, and when stepping heavily, particularly during the forenoon, the pain seemed to jump up to the top of the head, like a concussion. This particular pain finds a specific remedy in *Calc.* c. 6x, which was given; "a powder when worse," with Sac. Lac. In this way he got a dose every morning. Much aggravation followed the three doses taken; and the parents became alarmed, and agreed to call with him twice a week. Prescribed *Sac. Lac.* And now he was better, but discovered some moisture in his right ear. Examination of hearing distance for the watch showed about, R. E. = $\frac{20}{40}$, L. E. = $\frac{20}{30}$, but on the right side a quantity of cerumen in the meatus; and this must have either caused or been coincident with the discharge, and with an unsuspected otitis.

On cleaning out the meatus, the membrana tympani appeared

pearly, not perforated, but corrugated; confusing the outline of the cone of light.

Sac. Lac. was continued, and instead of the next call, came a postal card, announcing that since the last visit "he appears entirely relieved from his long and troublesome headache, and general debility."

Such an experience should lead to constant suspicion in cases of intractable anterior headache, of causation in affections of the ear; the more when we remember that the auricular and temporal nerves do really ascend to the vertex and forehead, in close relation with the ear itself.

SOME CLINICAL ILLUSTRATIONS OF THE EFFECTS OF ACUTE DISEASES OF THE PHARYNX AND LARYNX.

By H. H. Crippen, M.D., San Diego, Cal.

It is impossible to draw the limit at any point between the beginning of the anterior nares and the termination of the larynx, and say that an acute or a chronic affection of any one portion of the mucous membrane lining this tract is confined in its consequences to that part which it first affects.

Clinically we see this every day; pathologically we may study this as a result of the close relationships of the vaso motor centres governing the vascular supply of all this section. A disease of the pharynx extends beyond the limits of the pharyngeal mucous membrane, both upwards and downwards; and so with any disease of the larynx or of the anterior or posterior nasal cavities.

Therefore, if one gives attention to describing an effect of acute pharyngitis, it will be found difficult to limit the description to the pharynx alone. Likewise it is impossible to say, in a given diathesis, where we may seek the end of the action and the reaction, between acute disease and the vaso motor factors, in the influence that will be exerted over predisposition to succeeding lesions. For these reasons the cases here taken up cannot illustrate all the possible effects of acute disease, but give, as far as possible in clinical form, only a small addition to the literature of the subject.

The most common effect of acute pharyngitis is simple chronic pharyngitis; not, however, as a direct effect of one attack, but as the result of numerous attacks. Once established as a chronic trouble, the patient generally pays little attention to it, and most frequently you will be called upon to treat some co-existent nasal difficulty, rather than the pharyngeal disease.

All the symptoms of the disease are those due to pathological

changes in the membrane. Instead of the normal smooth appearance of the membrane and the sharp definition of the pharyngeal pillars, the throat assumes a thickened and somewhat granular state; while the anterior and posterior pillars show, by the obliteration of the space between them and the pharyngeal space, the thickening, even more plainly than in the pharynx proper.

I have found it so much of an impossibility to obtain a picture of a perfectly normal throat, that I have taken for the sake of comparison one of Lajous' admirable representations, and beside it have taken a clinical illustration of a case of simple chronic pharyngitis occurring in a lad of nineteen. This followed a life history of sore throats; a legacy from a tuberculous father and a neurotic mother. The thickening pushes the membrane forward, while the pillars blend with the posterior portion of the pharynx. The granular appearance is not to be mistaken for that of follicular pharyngitis, for in the former it is due to unequal thickening, while in the latter it is due to blocking of the mouths of the follicles and to the fact that their contents thus become encysted.

With the thickening of the pharyngeal mucous membrane, we find increased action of its glandular elements with the accumulation of masses of thick tenacious mucus, which increases in quantity with each successive exacerbation. From this it is that we find so often the elongated uvula, as a direct consequent of the constant hacking and scraping of the throat which the patient finds necessary to clear out the accumulation that causes discomfort. In general the uvula is not elongated as much as in the illustration, but I have found that the longer the affection has continued, and the more often it has been augmented by successive attacks of acute pharyngitis, the greater becomes the involvement of the soft palate and uvula.

Follicular pharyngitis is rarely a consequent of acute disease of the pharynx. In fact, I never have seen a case in which there was a previous history of pharyngitis catarrhalis acuta, without the accompanying factor of extensive use of the voice, and it is more probable that the latter factor is the determining one.

The occurrence of *retro-pharyngeal abscess* as a complication of acute pharyngitis is rare. Most of the cases reported have occurred at an early age. The illustration I present is that of a case occurring in a boy of 10 years. This began as an ordinary sore throat, but after old-school treatment by astringent applications came

into my hands. Hepar sulphur, and evacuation of the abscess, speedily terminated what threatened to be a serious complication of acute pharyngitis.

A retro-pharyngeal abscess becomes more dangerous, however, in children of early age. Here it may be confounded with croup and require a very careful differential diagnosis; cough, however, is absent and the voice becomes nasal rather than hoarse.

Evacuation of the abscess demands careful attention lest asphyxia occur from escape of pus into the larynx. Témoin (*Revue mens. des maladies de l'enf.*, April, p. 172–177), has been unfortunate to lose two cases of retro-pharyngeal abscess after incision. In one, that of a two year old boy, asphyxia followed the incision, and four days later death occurred from broncho-pneumonia. In the second case, a ten months old child, the incision was also followed by asphyxia. On the third day, tracheotomy was performed, and on the fifth day, broncho-pneumonia began, terminating in death five days later. It is better to use a long, special aspirating needle in evacuating the abscess, rather than expose the patient to these dangers of simple incision.

It has been said that acute inflammatory affections of the pharynx may be the cause of hypertrophy of the tonsils. This I do not believe, but I do believe that the same lowering of tone, or lessening of resistance to impressions, on the part of the vaso motor centres governing the vascular supply of the pharyngeal mucous membrane, extends equally to those governing the influx of blood to the tonsils, and that, whether the diathesis manifests itself purely in predisposition to affections of the pharyngeal mucous membrane, or whether it includes hypertrophy of the glandular elements of the tonsils, the changes are to be attributed to the same morbid deviations on the part of the sympathetic system of nerves, and not one as the consequent of the other.

Thus far, nothing has been said of therapeutics, for several reasons: First, Because it is useless to occupy valuable space in laying down a special series of remedies to apply to corrections of the consequences of acute pharyngeal affections, for almost never do we find such sequelæ occurring as an isolated series of phenomena, confined to the pharynx, and thus cannot prescribe for such an entity of throat-disease, without including the laryngeal, nasal, and ear symptoms (and, still more important, the general constitutional symptoms), a

coterie of conditions that may demand almost any remedy in the materia medica; and, secondly, because I wish to emphasize the fact, that, while a certain dependence may be placed on the objective symptoms, such as the bright-red appearance of the throat in the Belladonna patient, or the pushing forward of the thickened mucous membrane to which Lachesis corresponds, these alone cannot guide us; our study of the case in the chronic results of acute throat troubles must be profound enough to take in all the general conditions and *all the antecedents* of the present condition.

Besides this, a thought on prophylaxis is worthy of consideration. Let parents understand the hygienic conditions preventive of throat disease, and, above all, impress upon them the consequences of allowing acute pharyngeal affections to run on into the chronic forms, with the difficulty and even the impossibility of restoring the mucous membrane to its normal state.

In the consideration of laryngeal affections as consequences of acute conditions, I will take up only chronic laryngitis and paralyses, in so far as I have seen them in practice. However, I wish also to mention that I have seen a case of tuberculous laryngitis, which followed an acute catarrhal inflammation.

Now, as to *laryngitis catarrhalis chronica.* This may arise as a direct consequence of acute laryngitis, an extension of the infiltrative processes of the acute disease into the hypertrophic processes and hyperplastic indurations of the chronic affection. It also holds an indirect relation to acute pharyngitis, inasmuch as the subacute laryngitis, which is so frequently an accompanying condition of acute pharyngeal affections, is prone, by extension to the deep layers of the mucous membrane and to the muscular tissue, to become a deeply seated disease, and this especially when, with existing subacute laryngeal changes, the voice is extensively used. So that, in a distant way, we may indirectly regard chronic laryngitis as a consequence of acute pharyngeal affection. However, it is to be remembered that chronic laryngitis is, in many cases, due purely to traumatic irritation, to the irritating presence of post-nasal discharges, or, when nasal respiration is obstructed, to the irritating action of air which reaches the larynx without being warmed, moistened, or freed from mechanical irritants, such as dust, smoke, and the various foreign substances to be found in the atmosphere of our workshops and factories.

Clinically, our description comprises chiefly the symptoms of cough, hoarseness, and the objective appearances given by the laryngoscope.

Pain occurs only in exacerbations of the diseases, and is then due to abrasions, and, when accompanied by expectoration, streaked with blood, to ulceration. In these bad cases where the abrasions become ulcerations with tendency to destructive tissue changes, the disease is no longer localized, but is accompanied by the symptoms of general disturbances.

In comparing the laryngoscopical appearances, with the appearances of the normal larynx, it will be seen that the changes most markedly noticeable are those concerning the epiglottis, which shows enlargement of the bloodvessels; of the vocal cords, which are changed from their light color to redness, and also changed as to their relationships to each other, having lost their parallelism; and of the mucous membrane in general, which shows the thickening most plainly over the cartilages of Wrisberg and Santorini in such a manner that these prominences come more sharply into view.

Finally, a few words as to paralyses. With excessive tissue infiltrations, which take place during the inflammatory processes of acute laryngitis, we certainly have involvement of the muscles, to greater or lesser extent, by plastic exudation. Now, when this infiltrative process takes on hyperplastic induration, by continuance of an acute disease into a chronic affection, we are in a position to say that the action of the muscle is weakened by an abnormal condition of the muscle itself, and not through any focal or general lesion of the brain, nor through peripheral change in the motor nerve. Paralyses and pareses of the laryngeal muscles, then, are among the secondary effects of acute laryngitis.

In discussing the therapeutics of these effects of acute diseases of the larynx, the same will hold true as in chronic throat troubles. Co-existing nasal and pharyngeal lesions must be alleviated before one can expect to cure the laryngeal trouble. So long as nasal respiration is performed badly, so long will the laryngeal mucous membrane be kept in a state of irritation by the inspired air. Local applications for therapeutical purposes are not a favorite procedure with me, but for cleansing purposes I frequently utilize the solvent action (on mucus) of a finely divided spray of a solution of the Borate of soda. In the treatment of laryngeal affections, this spray

must be used at a low pressure to avoid the irritant action of aqueous particles, when forcibly striking upon the laryngeal mucous membrane.

As to remedies, I feel that I can add nothing but confirmation to the symptoms of those drugs which have been treated of at length in our text-books, and, again, while there are a few drugs that find common use, there are many others that hold relations to these effects of acute disease, but they are only to be arrived at by a careful search of the present and past conditions of the larynx.

Most frequently I find Spongia, Hepar sulph., Kali bich., Carbo veg., Lachesis and Sulphur to be indicated; less frequently, Argentum met., Argentum nit., Causticum, Kali mur., Phosphorus, Sanguinaria and Yerba santa.

INFLAMMATION OF THE THROAT AND EAR, FOLLOWING THE REMOVAL OF NASAL POLYPI.

By Edward B. Hooker, M.D., Hartford, Conn.

During the past winter I operated on the nose many times, removing cartilaginous and bony growths from the septum, making applications of chromic acid to the turbinated bodies, cauterizing them with the white-hot platinum wire, and removing portions of them with the cold snare. These operations were performed in all sorts of weather, warm, cold, dry and damp, and during rain-storms and snow-storms. In no case was there any bad result, nor could I perceive that the weather had any influence upon the healing process. During an unusually cold week I operated upon the septum five times, and all five cases turned out unusually well. In no case was there entire stenosis of both sides of the nose; in many of them one naris was occluded or nearly so by turbinated hypertrophy, or by bony growths or deflections, but in them all nasal respiration was carried on through one or both sides more or less imperfectly, during the daytime at least. I had been told that operations upon the septum were not safe during the winter, and should be deferred until warm weather. My experience is directly opposed to this statement, and I should not hesitate to operate during all ordinary winter weather, unless the patient was liable to undergo some unusual or severe exposure. In one instance, a gentleman came in from a neighboring town in his sleigh, and had a cartilaginous growth removed from the septum. Before he was ready to return, a hard snow-storm set in, and, in spite of my remonstrance, he drove home, a distance of ten miles, in the midst of the storm, and there was no evil result.

One kind of operation, however, is liable to be followed by a less fortunate result, and, although my experience with it is somewhat limited, it may be of sufficient value to be stated, serving at least to

call out discussion and obtain an expression of opinion from those whose experience is greater.

During the winter I operated twice on cases of nasal polypus. In both cases both nares were almost completely stopped up by two or more polypi. In one case nasal respiration was not carried on at all, and in the other imperfectly. The weather at the time of operation was not unusually severe, simply ordinary, cold, winter weather. The first case was that of a vigorous lady, sixty-five years old, who had suffered nearly all her life with catarrh, but who had never had her nose examined. She had almost entirely lost the sense of smell and taste, caught cold very easily, and was subject to attacks of tonsillitis. I found both nares nearly filled with polypi. I removed them from one side only, using snare and forceps. The polypi were not attached by single pedicles, but had long lines of attachments, so that the snare was not available for the entire removal, the forceps being needed to complete the operation. The nose on that side was rendered clear, so that respiration through it was perfect. The nose and throat were very sensitive to cold air after the operation, and I directed her to wear a plug of absorbent cotton to partially exclude it. In spite of this precaution, however, the next day the throat was inflamed, she having passed a restless, feverish night. The nose itself was not attacked, and was free from pain or soreness, but the pharynx, soft palate and tonsils were red and swollen, while the last were covered with small white spots. The throat looked as it usually does at the beginning of an attack of tonsillitis. The inflammation, however, subsided in less than a week, tonsillitis did not develop, and the nose healed perfectly. But for several months, indeed until warm weather, both nose and throat remained very sensitive to cold air. I have not yet operated upon the other side, but shall do so within a short time. It is interesting to note that, although smell and taste had been lost for more than thirty years, they were immediately restored in a slight degree, and are growing steadily more acute. Neither vision nor hearing was affected by the polypi, both senses being unusually keen.

The second case was that of a young woman twenty-one years old, both sides of whose nose were completely filled by polypi, so that nasal respiration was impossible. I removed two polypi from the left naris with the snare, bringing them away intact, each having been attached by a small pedicle. No bad results followed this oper-

ation, and nine days afterwards I cleared the left naris, removing two polypi from it with the snare, but being obliged to use the forceps to complete the removal of one of them, which was not attached by a single pedicle. The second operation was followed by an inflammation of the throat which amounted to little, and an inflammation of the right middle ear which amounted to a great deal. The progress of the inflammation was slow, the patient meanwhile suffering much pain and being part of the time completely deaf in that ear. Perforation of the drumhead occurred thirteen days after the operation, and matter was then discharged for two weeks. The perforation gradually healed and hearing by degrees returned, so that it became almost as good as in the other ear, which was not inflamed at all. As there was nothing to direct my attention to the ear before removing the polypi, I did not test her hearing, but there is no reason for supposing that the right ear, which suffered from the inflammation, was any more perfect than the left. When I last examined her—June 9th—the hearing of the left ear was $\frac{8}{80}$, after inflation $\frac{12}{80}$; right ear $\frac{9}{80}$, after inflation $\frac{11}{80}$. There is still some tinnitus of the right ear, but this is now about the only result of the inflammation remaining. Puls. 200, in infrequent doses, was the only internal remedy used. After the perforation the ear was packed with finely powdered boracic acid every two or three days. Warned by the course of these two cases I did not operate again for nasal polypi until warm weather had set in, and there have not been any such after effects in my subsequent cases.

I am convinced that the danger of throat and neighboring inflammation, after removal of nasal polypi, arises from the fact that surfaces long unaccustomed to direct contact with cold air become suddenly and freely exposed to it, since polypi almost always widen the interior of the nose, so that when they are removed its capacity is abnormally large and admits an abnormal supply of air, which chills the sensitive surfaces with which it comes in contact. The removal of polypi, when skilfully done, usually does less injury to the membranes of the nose than operations upon the septum and turbinated bodies, which I have found can safely be performed at all seasons. Yet their removal so changes the aeration of the nose and throat that it is not wise to meddle with them during the prevalence of cold weather, unless they are the exciting cause of morbid conditions which demand prompt relief.

REPORT

OF THE

BUREAU OF PSYCHOLOGICAL MEDICINE.

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NUTRITION AS AFFECTING THE IMAGINATION.

By Francis W. Boyer, M.D., Pottsville, Pa.

For the health and exercise of the functions of the nervous system, and of the mental actions manifested through its organs, certain vital conditions are requisite, the absence of one of which is sufficient to induce mental or nervous disorder. The brain and spinal cord, the centres of the nervous organization, must be placed in due relation with the other constituent parts of the body by means of the nervous filaments distributed among its different structures A second indispensable condition for the healthy action of the nervous system is a due supply of arterial blood. This implies a triple combination of circumstances, for, in the first place, a certain *quantity* of blood must be contained in the vessels supplying the nervous struct-

ure; secondly, the blood present in those vessels must move through them with a certain degree of velocity or amount of impulse; and thirdly, the blood thus circulating must be *arterialized* and *healthy*. It is thus evident that the healthy action of the nervous system is chiefly dependent upon and regulated by the state of the circulation of the blood, and that any disorder of the latter—whether general or local—may at once induce corresponding irregularities in the functions of the former.

It is well known that excessive cold retards the motion and diminishes the quantity of the blood circulating through any exposed portion of the body, and thus benumbs the latter; or, in other words, suspends the action of its nerves in the same manner as a tardy circulation through the vessels of the brain, such as that occurring at old age, induces torpor of the mental functions. The cerebro-spinal nerves distributed throughout the body, which connect the mind with the external world, at the same time that they maintain an intimate union and sympathy between the compound parts of the animal organism, should therefore no longer be regarded as mere passive cords analogous to the wires of the electric telegraph with which they have so often been compared. They possess higher and more active powers, and, in studying their disorders, it will be well to bear in mind the possibility of many perverted sensations and local defects of enervation originating in these delicate and excitedly endowed media of vital intercommunication.

Another essential for the healthy mental development is the absence of any noxious matter or impurity in the blood circulating through the system; and, when it is remembered that various poisons—such as carbonic acid and the elements of certain noxious secretions and excretions—are generated within the body, and some in the blood itself, and are capable of producing their injurious effects with as much certainty and uniformity of action as poisonous substances introduced from without, the importance of this influence upon the healthful action of the nervous system must be sufficiently obvious.

In the consideration of the maintenance of healthful thought-producing actions, sleep—the most potent invigorator of the higher functions of the nervous system—must not be forgotten; for its privation, from whatever cause arising, will often be found intimately connected with the disorders arising from malnutrition.

Lastly, it is to be observed that mental and sensorial health is best preserved by the due and regular exercise of the intellectual and moral faculties in alternation with a certain amount of bodily exertion. In reference, then, to mental hygiene we must ever remember that man is not all soul, all intellect, or all body, but a compound of the three.

The morbid conditions immediately affecting the brain, to which we can most generally refer disordered actions, are: First, arrested development; second, the inherent vital powers of the peculiar structures of the brain may be impaired by, or may retain an unusual liability to, disorders from hereditary or congenital agencies. For experience has amply shown that among other sources of disordered actions of the inherent vital powers of the cerebral tissues, is to be numbered a vitiated condition of the parental fluids, and hence in mental and nervous disorders, as in gout and scrofula, we are often enabled to refer the malady in some degree, at least, to hereditary predisposition. Thus, a defective condition may result from inevitable and unknown sources of disorder generated within the tissues themselves, or may be induced by excessive stimulation or insufficient or perverted exercise of the mental functions, but by far the most active agency in exciting disordered action of the brain is a departure from, or violation of, the great basis of all healthy mental and sensorial existence, namely, a normal motion and quality of the blood contained in the vessels of the brain and its associate nerve structure.

Delirium, pain and other indications of a morbid exaltation of the functions of the nervous system doubtless may be, and often are, the effects of malnutrition, and careful clinical observation has demonstrated beyond doubt the possibility of those symptoms originating in a condition characterized by debility of the vital powers by an absence of local plethora.

By the term "temperament" the ancients expressed those peculiarities of mental and bodily constitution which separate the inhabitants of the same country into certain natural groups or classes, as follows: Thus, in persons of a lymphatic temperament the mind is generally sluggish; the sanguine, in which the imagination is active and the mental energy considerable; the nervous, in which the higher faculties of the intellect—judgment, comparison, etc.—are said to be most frequently evinced. In the latter class the very sensitiveness or mobility of the nervous system, which favors this men-

tal development, equally increases its liability to disorder. With this temperament generally exists bodily debility. In this class the imagination is chiefly acted upon by the surroundings of the individual, and its causes are more prevalent in populous towns in proportion to the deviation from simplicity of living.

Any cause which may have the effect of producing deterioration of the quality of the blood, such as bad air, lack of exercise, insufficient or unwholesome food, passions of the mind, intense application, wasting diseases, climate, and medicine—all tend to lessen the healthful blood supply and correspondingly lessen the capability for healthful thought or mental action. One of the most common cases of indifferent quality of the blood supply is excessive mental prostration, which, in turn, creates a morbid or melancholy line of thought. On the other hand, excessive indulgence in stimulation, while it lessens the quality of the vital fluid, increases its activity and rate of passage through the bloodvessels of the brain, thereby producing a brilliant imagination and rapidity of thought corresponding in its activity with its unnaturalness. These causes, in their various operations over the human mind, excite extravagant hope or abject depression of spirit, harass the nervous system, produce wakefulness or unrefreshing sleep, engender passions, and impair the appetite. This is succeeded by melancholy or hypochondriacal thoughts, the cause of which is generally referred to the organs that prepare and assimilate the nourishment of the body.

All nervous persons are uncommonly fond of drugs, and constitute a majority of the persons who apply for medical relief; and, to the causes which produce malnutrition, we may add that confinement within doors, a uniform mode of living, and sedentary habits are so commonly met with, that a sluggish condition of digestion is among the most frequent complaints in this class of individuals.

In the consideration of causes which produce malnutrition—hence an unwholesome imagination or thought—we must not overlook the enfeebled nutrition of persons inclined to tuberculosis. It is a well known fact that tuberculosis tends to insanity, especially in its melancholic forms; and, on the other hand, that insanity tends to tuberculosis.

Thought is a continuous stream constantly passing the mind. It is unconscious of its action. In health we are not conscious of the impressions made upon the brain, albeit they assuredly send their

contributions to the stream of thought which is continuously going on. When a disordered organ sends forth a morbid expression to the brain it no longer does its work there in silence and self-suppression. The hypochondriac cannot withdraw his attention from the morbid sensation to which it is irresistibly attracted. Imaginations of dreams leave no impression, while the sight of a similar distressing vision while awake may cause mental shock and disease.

In order further to elucidate our subject, namely, malnutrition as affecting the imagination, we have but to mention the fact that the digestive organs have a close sympathy with the sense of taste; the respiratory organs, with sense of smell, in like manner similarly associated. The state of the digestive organs notably affects the general sensibility of the skin. Disturbances of these physiological sympathies may become the occasion of a variety of delusions. Digestive derangement perverting the taste will engender a delusion that the food is poisoned; diseases of the respiratory organs operate sometimes to produce disagreeable smells which are then perhaps attributed to objective causes. Increased diminution or perversion of the sensibility of the skin, one or another of which is not uncommon, may undoubtedly be the cause of extravagant delusions. Poverty and vitiation of the blood may certainly play a weighty part in producing perverted imaginations, and lessen the supply of blood to the brain below a certain level, and the power of thinking is abolished.

During sleep the supply of blood to the brain is lessened naturally, and we perceive the effects of the lowering of the supply which usually takes place in a sort of incoherence or wild delirium of ideas just before falling off to sleep. To a like condition of things we ought, most probably, to attribute the attacks of delirium that occur now and then in consequence of great physical exhaustion and from a great and extended loss of blood, or just as convalescence from fever or other acute disease is setting in, or in the prostration of phthisis. Slight stimulation at such times will often increase the nutrition of the brain by increasing the activity of circulation and thus afford relief. If the state of the blood be vitiated by reason of some poison operating in the body, or introduced into it from without, the mental functions may be seriously deranged. We are able indeed by means of the drugs at our command to perform all sorts

of experiments on the mind. We can suspend its action for a time by chloral or chloroform, can exalt its functions by small doses of opium or moderate doses of alcohol, and can pervert them by producing an artificial delirium by doses large enough of Belladonna, Indian hemp, or Hyoscyamus. We can positively do more experimentally with the functions of the mind-centres by lowering and elevating nutrition than we can do with those of any other organ of the body. When these are exalted in consequence of a foreign substance introduced into the blood, it cannot be doubted that some physical effect is produced on the nerve element, which is the condition of the increased activity, not otherwise, probably, than as happens when a fever makes, as it certainly will sometimes do, a demented person whose mind seemed gone past all hope of even momentary recovery, quite sensible for the time being. This might teach us that the molecular elements of the brain may be so acted upon by stimulants or nutrients as to regulate in a great degree the power of thought or the imagination.

Life is surrounded by forces that are always tending to destroy it and with which it may be represented as one contending warfare. So long as it contends successfully with them, winning from them the nourishment necessary for furthering its development, it flourishes; but, when it can no longer strive, when they succeed in winning from it and increasing at its expense, it begins to decay and die. So it is with mind in the circumstances of its existence.

The individual who cannot maintain his nutrition, being weak, must be miserable, must be a victim; and one way in which his suffering will be manifest will be in the vagaries of his line of mental thought. Thus it is that mental trials will serve in the end to strengthen a strong nature and break down a weak one which cannot fitly react; and that the efficiency of a physical cause of perverted imagination betrays a conspiracy from within with unfavorable outward circumstances.

As physicians, we cannot afford to lose sight of the physical aspects of mental states, if we would truly comprehend the nature of mental disease and learn to treat it with success. A metaphysician may, for the purpose of speculation, separate mind from body and evoke laws of its operation out of the depths of self-consciousness; but the physician who has to deal practically with the thoughts, feelings and conduct of men, who has to do with mind, not as an abstract

entity, concerning which he may be content to speculate, but as a force of nature, the operations of which he must patiently observe and anxiously labor to influence, must recognize how entirely the integrity of the mental functions depends on the integrity of the bodily organs and must acknowledge the essential unity of body and mind.

Many instances might be adduced to elucidate the subject under consideration and many classes of under-fed brains, and the vagaries of their imagination pointed out; and obversely, over-fed or plethoric conditions which make mental action a task and the exercise of the imagination a rare condition.

Many recorded examples of starvation, exposure, and the absence of water to drink, as producing malnutrition, can be referred to in the various series of Arctic explorations, shipwreck, and disaster. The accompaniments of such privations are ordinarily exalted vision, imaginations of bountiful supplies of food and water, always at a distance, and, finally, as bodily exhaustion follows, a loss of moral tone is prevalent, a spirit of independence, a refusal to obey orders, a suicidal tendency, in fact all the disorders incident to insanity. This is, in fact, very similar to the period of convalescence from typhoid fever, during the progress of which, nutrition has almost been suspended, and the mental, as well as the bodily, functions have been brought to their lowest ebb.

In the instance of perverted imagination owing to hereditary predisposition, it will be necessary to remove such conditions before mental healthfulness can be established; while in persons whose imaginations are perverted by the use of stimulants, drugs, or unwholesome foods, it will be necessary to take from them the causes.

In individuals in whom the cause exists in the impairment of the digestive function, it will be necessary to specify such a line of care, diet, and exercise as will best conform to each individual requirement.

In all instances the utmost care is necessary to preserve physical health and strength by attention to cleanliness, proper clothing and food, cheerful surroundings, and the exercise of the mental functions upon subjects more healthful than those ordinarily indulged in by the diseased mind.

MENTAL POISE AND MALNUTRITION.

By E. O. Kinne, M.D., Syracuse, N. Y.

"Mens sana" presupposes "corpus sanum."

To be able to say positively that there can or cannot be a mind in perfect equilibrium occupying a body whose nutrition is perverted, would require a deeper knowledge of psychological processes than we at present possess.

We can, however, arrive at a theoretical conclusion which, possibly, may be upheld by experience. In the first place, we assume that mental activities are manifestations of processes within the brain and its nervous distribution, originated by extraneous impressions or developed *de novo* within.

This would include all voluntary, involuntary and reflex operations of the human being.

Inversely, then, these "operations" are the indices of mental action as they are the appreciable result of brain and nerve motion; and from them we are compelled to predicate the health or unhealth of the mind, the consistent or erratic mentality, according as they are or are not in harmony with all the circumstances and influences to which the individual is subjected.

Whatever change is experienced by the nervous system, call it molecular rearrangement, or what you will, the result of which change is a mental motion and its exhibition, that change must always be the same for the same result. Whenever we note a constant harmony between causes and results, and single or combined influences produce the anticipated recurring condition, we are justified in saying "the man's head is level," *i.e.*, the mental state is normal. The converse of this proposition is also true, that, when the causes remaining the same the results are erratic, we are safe in assuming an unbalanced mind.

The influences which may affect mental harmony are, doubtless,

many, but we consider only one, nutrition or, rather, perverted nutrition.

Malnutrition may be general, affecting the entire body, or regional, affecting certain organs or systems, in both of which the nutrition may be redundant or deficient.

To what extent will these perversions affect the mind? In a normal adult the waste and supply are supposed to counterbalance; if, however, the supply exceeds the demand, the organs enduring the overloading are impeded in action or compensatory stimulation becomes necessary. In the one case, there is torpor of the entire being, predisposing to chronic destructive changes; in the other case, there is a hyperactivity of nervous centres, predisposing to acute apoplectic and paralytic diseases. Again, there may be a deficient nutrition in general and, the waste remaining the same, atrophic conditions result. These will be accompanied by an urgent cry of the body for more nutriment, a demand which acts as an irritant to the nervous system, and, if long continued, tends to produce acute derangement of mental action of varying degree, from the mildest form to violent insanity.

Here, again, there is a limit beyond which the mind becomes sluggish in action, the result of exhaustion.

Local derangements of nutrition produce the same results, more or less limited, as the organs affected are more or less intimately related to the nervous centres.

These aberrations are of the milder forms, generally under the control of the will, and are largely illusions. In excessive nutrition, illusions are frequently met, while in deficient nutrition, delusions and hallucinations are common.

A case in point will illustrate: Mr. A., in middle life, always of active business habits, suffering general deficiency of nutrition with atrophy; no organic lesion. Extreme mental depression with hallucinations regarding his own condition and his friends. The malnutrition antedated the mental derangement.

If the condition continues, destructive changes will occur in the nervous centres and absolute insanity result.

Here is a man who has lost his ability to transact business by reason of the fact that his mind is entirely preoccupied by his belief in and consideration of his own failing health.

His memory is perfect, he is entirely able to take care of himself,

yet he has a dreary future before him unless the proper food stimulus can be supplied to the nerves.

Another case, in some respects similar and in other respects diametrically opposed: Miss M., an invalid many years; emaciated, bloodless, retains little food, circulation very poor, body poorly nourished; mind hyperactive, no disposition to sleep; mind constantly at work composing poetry, fantasies, ludicrous letters and speeches. The little food ingested nourishes the brain to the detriment of all other organs.

The opposite of the last case is often found. Miss C., full habit, well nourished, organic functions, for the most part, normal. Mental condition weak, cannot bear any excitement, prolonged conversation exhausts, discontinuity of ideas. All the nourishment she receives does not strengthen the nervous system a particle. In this manner, cases might be multiplied, but every physician meets them in his practice. Perhaps it would be a too broad generalization to say *post hoc, propter hoc*, but the facts still remain.

Of less striking importance, but of more frequent occurrence, are the temporary derangements for which we prescribe daily.

A patient consults you whose whole demeanor betokens a clouded mind.

You recognize the condition as one of disturbed assimilation, and prescribe accordingly, to the entire relief of the patient.

The mental disturbances which result from disease of the digestive organs are not wholly accounted for by any possible pain which may accompany them; but rather by the fact that the nerve centres are deprived of their accustomed stimulus and, the nervous motion deranged, the mental phases suffer correspondingly.

This, then, would be our conclusion of the question: that as the brain and nervous system are the organs in which mental action occurs, it is necessary that they should receive the proper stimulus in proper amount to insure a normal mental action. Whatever excess or deficiency is suffered, by just so much is the mental harmony endangered.

Absolute excess or deficiency is no more potent in producing a disturbance than relative excess or deficiency, and the more general the derangement the more profound the mental disturbance, not excepting the limited derangement of the nervous system itself.

MIND-FAG AND MALNUTRITION.

By J. G. Baldwin, M.D., New York, N. Y.

"Mens sana in corpore sano."

This trite saying of old Juvenal has passed into an adage, containing so much of truth, as well as of common sense, that it has come to be almost accepted as an axiom.

In order to understand the true relations of mind-fag and mal- or defective nutrition, we must first examine a little into the relation between nutrition and the mind.

It is not always easy to clearly discriminate between what we call mind and the brain. It may help us to such a discrimination if we define the brain in this article to mean simply the substance contained in the skull and commonly understood in the anatomy of the body as the Brain, while the term Mind will represent that action of the brain which shows intelligence or intellectual grasp.

It is hardly possible to locate positively the exact part of the brain which is the seat of the mind, nor is it necessary to do so, for it is the action of the brain as a whole that shows the mental calibre or force.

Phrenologists and their followers assert that certain parts of the brain are the sources of certain actions of the mind. While there is a degree of plausibility if not of truth in this theory, it can hardly be accepted as positively proven.

A popular belief, in which there is a certain amount of truth, is that the larger and heavier the brain, the stronger will be the development of the mind.

This is not, however, an arbitrary rule, for we have instances recorded where the brains of persons of the lowest degree of idiocy have been but little, if any, below the average weight, and in some

cases, even heavier than those of individuals noted for their intellectual talents.

Though the activity and force of the mind do not depend altogether upon the size and weight of the brain, they do depend upon a healthy condition of the brain itself. For example: In cases of anæmia of the brain we have depression of the mental faculties with a tendency to drowsiness.

In hyperæmia we have mental irritation with excitability amounting even to frenzy or mania.

With a compressed brain, as in apoplexy or hydrocephalus, we have a tendency to coma with a more or less complete obliteration of the mental faculties. According to Flint, "The loss of cerebral substance by repeated hemorrhages is sooner or later followed by weakened memory, tardy, inaccurate and feeble connection of ideas, and a variety of phenomena denoting impairment of the intellectual faculties."

These are not, however, the conditions represented by the term mind-fag. This means more particularly that state which exists in one whose mind has been working actively to a certain point and then loses its power either temporarily or permanently.

Our purpose is now to inquire how far this deterioration arises from defective nutrition.

Mal- or defective nutrition may be caused:

1st. By improper diet.

2d. By defective digestion or imperfect assimilation.

First.—As to Proper or Improper Diet.

Does the brain require a peculiar diet for its growth and sustenance?

As a general rule, it does not, for a diet that is sufficient for the needs of the system as a whole, is also sufficient for the brain itself as well.

There should always be a proper proportion of nitrogenized and non-nitrogenized food.

In order to obtain this, a variety of food should be used, as there is no one article of diet that contains all of the required elements in sufficient quantity.

When proper care is taken in this respect and due allowances are made for the peculiar environments, we shall have the sound mind in the sound body which is the state of mental and physical perfection.

There are times when peculiar and heavy drafts are made upon the intellectual faculties, and then there must be a corresponding addition made to the diet, suitable for sustaining the brain during its time of trying activity.

Of the various articles used for this purpose, cod-liver oil, either alone or as an emulsion with the phosphates, is one most frequently resorted to and generally with great benefit.

Oatmeal is also a food which enables the brain to sustain great mental activity successfully.

Latterly, the tincture Avena sativa has been used with equally good results.

Coca is a comparatively new remedy, much praised, but greatly overrated, as to its beneficial effects on the nervous system. It has a much greater influence in maintaining the physical strength.

Iron in various combinations is much relied upon to enrich the blood and thus strengthen the nervous and mental force.

Phosphorus, Zinc and Quinine have been used frequently for the same purpose and with beneficial results.

A fish diet has been popularly supposed to be a proper one for supplying the brain with energy and mental brilliancy, but facts do not warrant any such conclusion. We find on the contrary that the races of people who are compelled to subsist mainly on a fish diet are generally dull and stupid, with a very low degree of mental activity.

A purely vegetable diet does not meet in full the requirements of the brain, neither does a simple milk diet, nor a diet of meat exclusively, though these may be necessary for a time in certain cases.

A properly mixed diet is much the best under all ordinary circumstances. Dr. Carpenter says: "That a moderate proportion of animal flesh in the diet seems to favor the highest mental development."

Second.—Defective Digestion and Assimilation.

The cases of imperfect digestion producing disturbances of the brain are very numerous. Every physician has had frequent occasion

to treat derangements of the liver causing disturbances of the digestion and producing great depression of the spirits with great loss of mental force—a true mind-fag.

In many forms of functional dyspepsia, we often find mental weaknesses amounting to hypochondriasis or melancholia, which appear to be the direct consequence of the imperfect digestion, and which are relieved when the digestion is restored to a normal condition. Dr. Pepper says: "The mental disturbance—the anxiety, the gloom and the sadness—is to many dyspeptics more distressing than positive pain."

Physicians are frequently called upon to treat cases of neurasthenia or mind-fag which are clearly referable to disturbances of the digestion caused by the excessive use of alcohol in some of its various forms, or of opium or tobacco. I will not discuss the modus operandi of these agents, as that would carry me far beyond the proper scope of this paper, neither will I refer to the treatment required in such cases, as that would necessarily include the whole subject of digestion and indigestion.

I will mention one of the cases that occurred in my own practice during the past winter, which illustrates the principle above stated, simply premising that the subject did not use stimulants in any form, and had never used tobacco or opium.

The patient was a gentleman aged 28, and unmarried.

After leaving college he devoted himself to literature. He was correspondent, art critic and reviewer for a number of newspapers, besides doing other literary work.

He first complained of inability to write for any length of time without a feeling of distress in his head, principally in the back of it. This was not a sharp pain, but a fulness and throbbing, causing great confusion of ideas. It would pass off after a few moments rest, but would return again on resuming the writing. It would be produced by intense thought or by continued reading. This became so troublesome that he found himself completely disqualified for any mental effort, either reading, thinking or writing, and was obliged to resign his positions. There was also a feeling of general weakness, his tongue was thickly coated, the bowels constipated, the heart sluggish but excitable.

There was no thirst, but his appetite had not been good for weeks.

All mental work was at once suspended so as to give rest to the

weakened brain. Remedies were prescribed for the condition of the liver and to strengthen the digestive powers. Care was taken that the food should be of the most nourishing kind and easy of digestion.

This course of treatment was continued two or three months with slow but steady improvement.

Travel was then suggested, and a trip to California taken. He now reports that he feels perfectly well, that he has great physical endurance, and can read and write for hours at a time without any distress or discomfort.

THE RELATIONS OF NUTRITION TO MENTAL HEALTH AND MENTAL DISEASE.

By Selden H. Talcott, M.D., Middletown, N. Y.

Goethe, the German Shakespeare, once propounded a question, which may be rendered into English as follows: "Why are people so busy, and what are they roaring about?" And he answered his own question by asserting: "They want to feed themselves, to beget children, and to feed them as best they can."

Nutrition is always a matter of prime importance to the existence, development, growth and continuance of the human body, and likewise the health and activity of the human mind. In embryo, the fœtus feeds upon the mother; in its primal, separate and independent existence the child, likewise, pastures upon the sacred mounds of motherhood. In still later development, the products and inhabitants of earth, and sea and air are used for man's general nutrition. And when a ripe and sound body has been produced by the alchemy of an established evolution, then we observe not only the presence but likewise the supreme activity of that which is highest and best in the wonderful works of God; namely, the human mind. In early life, food is the chief factor in the production of an ample and tense bony system. And it is a builder not only of bone, but of ligament, of muscle, of sinew, of cellular tissue, of fat, and of an all-enveloping derma. And when, by means of the marvellous chemistry of nature and the influence of nutrition, you have a fully outlined structure, a structure that is sustained by its internal framework of bones and ligaments; a structure that is moved or restrained by muscles and sinews; a structure that is made comely by its shapely padding of fat and its smooth covering of skin; a structure that is stirred and controlled by those electric moters called nerves, and which is animated in its supreme perfection by an immortal spark of the Infinite; then

you have a being that is fitted to dance in a ladies' chamber to the bewitching breathing of an Egyptian lute.

Now the question arises, What are the relations which exist between the functions of nutrition and the health and activity of the mind, and how may these relations be best sustained by the individual? And how may the forces of the mind be disturbed and turned from their normal courses by the effects of imperfect or malnutrition?

Almost every one recognizes the fact that the brain is the chief and most important organ of the body, because it is the seat and the centre of mental activities. Almost every one recognizes also the fact that unless the brain is fully and properly nourished mental activity weakens and deteriorates. The same relationship exists between a healthful supply of blood to the brain and a high grade of mental activity, that exists between a full supply of steam in the boiler and great speed of the locomotive. Again, nutrition sustains the same relation to the nervous system that the Leyden Jar, with its imprisoned but all-compelling powers, sustains to the electric currents which bear their messages of peace or war in continued and active circuits around the world.

Nerve exhaustion is the antithesis of a full-charged and active nerve power. The nervous system in a state of health may be compared to a strong electric force acting upon a complete circuit, and sustained and impelled by an abundance of imprisoned reserve. While such a condition exists, there is capability for active and continued work. But if the forces are diverted from their regular lines by outlying wires, their energies are scattered, until the primal circuit is so much impaired that action becomes feeble, intermittent and uncertain. The condition of so-called "nervousness" is a result of a too free escape of nervous energy through the divergent lines of unwise dissipation, and through an inability on the part of the function of nutrition to make good the wastes which have been too rapidly superinduced.

The effects of nutrition of various kinds may be seen both in nations and in individuals. The Chinaman eats rice, drinks tea, warms the cockles of his heart with curry, flavors his dinner with the burned souls of rats and birds' nests, and becomes a small, imitative and short-lived, yet industrious and peaceful citizen of the Flowery Kingdom.

The Italian, more luxurious but less muscular than his Roman predecessor, eats his wheat refined and bolted and prepared in the

form of maccaroni, instead of masticating it in the raw state; and from a conquering soldier he has degenerated to a lover of ease, of filth, and of hand-organ music.

The German takes kindly to cabbage and cheese, pretzels and beer, and is slow, substantial, meditative, and given to complex speculations and philosophical deductions.

The Englishman eats beef and bread, and drinks beer; and under the influence of food, and drink, and climate he becomes both phlegmatic and irascible, both liberty-loving and domineering, both philanthropic and crusty.

The Scotchman eats oatmeal, and believes strongly in Calvinism, and in the stability of the Grampian hills. Under the influence of diet the Scotchman is strong in body, metaphysical in mind, and confident in himself. The self-satisfaction of a Scotchman under the influence of his selected food was happily expressed when an English lord declared that in Scotland the men lived on oats, while in England they fed that grain to their horses; and a Scotchman retorted, "Yes, that is true, and where in the world will you find such men and such horses?"

The Irishman subsists on potatoes and "poteen," and is sanguine in temperament, and sanguinary in daily practice.

The American feeds upon the collected products of every clime; and from ocean and river, from rocky hill-top and alluvial prairie, from southern slope and northern acclivity he draws his food resources. Especially is the American addicted to the use of every variety of stimulating meat, whether it be bird or bear, sheep, hog, or ox. He also takes his food in a concentrated form, using the "active principle" preparations of grain, and vegetables, and fruit. The result is an activity of the body and a brilliancy of mind which surpass the developed powers of all other nations on earth. But in the wake of this rare and costly development we find thousands of hyper-sensitive beings whose refinement of feeling is so extreme that they suffer excruciating agonies if they are touched by a breath of unfriendly air, and their brains and minds reel before the faintest shadow of earthly disappointment. In this rare-ripe throng we find thousands of broken, disgruntled, ruined wrecks, the unfortunate victims of excess in the use of hyper-stimulating nutriment.

Concentrated food stimulates the activities of the nervous system, of the brain, and the mind; and under the effects of such food, a

larger amount of brain work may be done in a given time than by the use of plainer and coarser foods.

But the use of concentrated and stimulating food, while it develops a lofty activity and excessive refinement, results finally in the premature wearing out of the nervous forces, and causes disintegration, disease, and death. Concentrated food stimulates and develops the brain, while it shrinks and shrivels the stomach, and disturbs the action of the intestines, the liver, the kidneys, and all excretory organs. Stimulating and concentrated diet, while producing active effects at first, tends steadily to derangement of the organs of digestion and assimilation, and leads almost inevitably to malnutrition and to consequent loss of mind and nerve power. The philosophy of all this leads us to reconsider and accept the truth embodied in the old adage, "Every man must eat his peck of dirt."

The tendency of the times has been to gratify an ambition for intellectual keenness and power. The brain, in its frantic efforts to get ahead and keep ahead, has overlooked the interests of the other members of the human United States, and has sought to rob those local communities, which have been named the heart, the lungs, the stomach, the liver, the bowels, and the kidneys, of their rights and prerogatives. The mind has entertained the conceit that all roads lead to the brain, and has acted upon the principle that all must be grist that comes to its mill. But the wisdom of local self-rights, as well as the wisdom of eternal unity and general harmony, must be recognized. The hands cannot flourish without the arms, nor can the legs make progress without the feet, nor can the head maintain its imperial position without the aid of the neck and trunk. Human development must be systematic, symmetrical, and cosmopolitan in order to be successful, and the rights and necessities of each organ must be conserved, or a retribution involving the entire mass will follow. Nutrition, to promote mental health, must be general, uniform, regular, and appropriate for the entire system.

There are two general classes of individuals whose peculiarities in the matter of nutrition render them worthy of notice at this time.

1. We have a class of men who consume large quantities of lean and stimulating meats, who drink much coffee, and who imbibe more or less wine and stronger stimulants. These are the active workers of the great city centres. Many of them came originally from the farm, with robust health, and, as they believe, with rational habits.

They enter with consuming activity upon the great projects and achievements of life. They build railroads, they dig canals, they spread their sails upon every sea of commerce; they buy, and sell, and get gain; they grow rich, they travel, they see the sights of every land; they dip their hands in every seething caldron of activity and accomplishment; and they often rise to sublime heights in the fields of learning, and statemanship, and modern invention. They become great lawyers, statesmen, inventors, theologians, and physicians. But they bring upon themselves and upon their posterity dangers which are likely to destroy the benefits which, by tireless energy, they have attained.

2. There are individuals, oftentimes the products of the preceding class, who are light and dainty eaters, and whose food consists of too small quantities of that which has been robbed of its natural and necessary dross. Concerning this class, Dr. Fothergill says: "They are quick as lightning, acute, sensitive, highly strung, high-minded and quick tempered. They are energetic and industrious. They are neat in their attire, intolerant of dirt—the sight of a cob-web is agony; their sense is highly strung and, when suffering with migraine, on the stretch, until it is scarcely exaggeration to say that, when lying in their bed-room, they can hear the cat walking across the kitchen floor. They complain of palpitation, and also of an opposite condition of heart failure, which differs from syncope in that there is no loss of consciousness." Such persons eat sparingly, and suffer intensely with neuralgia. They will take drugs freely, but seem to have an antipathy to food. In their ignorance and misery they forget the golden assertion of Romberg, that "pain is the prayer of a nerve for healthy blood." These small eaters of dainty food are intellectually bright and active; "they will be the soul of a party one day, ending up with a night at the theatre, the gayest of the gay. Next day is spent in bed in a darkened room, with a raging headache, the brow contracted with pain, begging to be left alone in their misery, the saddest of the sad. At other times they are wakened with a sharp headache which improves as the day goes on, and they dine out in the evening with a sense of enjoyment. Ardent, enthusiastic, capable of great self-denial, generous and kind to others, but forgetful of their own best interests, they are a race by themselves. They have played an active part in many modern movements."

Here are two special classes of Americans—the large eaters of stimulating food, and the small eaters of fine stimulating food. One has a heavy, rotund, yet active development; the other has a petite, sensitive, finely-strung development.

These are the classes to whom nutrition of a proper sort is of prime importance. An appropriate diet for these classes should have especial medical attention. In fact, the study of correct dietetics for brain workers should become a leading study in every physician's office, and in every medical college curriculum. Dietetics and reconstructives will be the leading topics of discussion in medical associations, and in private and business life, ere another decade has passed.

Let us now consider some of the articles of diet which have proved beneficial to nations and to men, and which are likely to promote mental health as well as bodily vigor.

The philosophers of the olden times satisfied their appetites with "corn, wine, and oil;" and they lived long, enjoyed reasonable happiness, and retained a brightness of vision and a clearness of intellect till after they were one hundred and twenty years old.

The Hebrews, both in bondage and freedom, grew into a lasting people upon grains, and fish, and vegetables, and very carefully selected meats. In the hour of prosperity, and in the land of promise and luxury, they remembered "the fish which they did eat in Egypt freely, the cucumbers, and the leeks, and the onions, and the garlic," and governed themselves accordingly.

Solomon, the wisest, declared: "I have eaten my honeycomb with my honey; I have drunk my wine with my milk." And his vitality, and benevolence, and greatness of soul were manifested by a comprehensive and abiding affection for seven hundred wives.

The Roman soldier chewed raw wheat as he marched, and conquered the world. The ancient Athenian grew wise and strong in intellect so long as he partook simply of the plain diet afforded from the Mediterranean Sea, his own hills of Greece, and from the pleasant pastures of his native land. Luxury of living destroyed the inhabitants of the Roman Empire, and robbed the Athenian of his mental powers.

The Spaniard, avoiding luxury, grows strong on bread and onions. The same may be said of the Englishman and his beef, coarse bread, and beer; of the Scotchman and his oatmeal; of the German and his cabbage and Rhine wine or beer; of the Indian and his corn;

of the Puritan and his beans with pork. The Esquimau eats the fat of the seal and walrus, and maintains a serene mental front amid the blizzards of the ice-bound North. The inhabitants of the sunny South subsist upon the orange, the bread-fruit, the banana, and fish from river and sea; and we find in them but slight development of mental disorders.

Now, if the brain workers of the world would stop and consider their own interests, they would acquire the habit of living upon a mixed and carefully selected diet. In warm weather they would eat fruits like the Southerner, rice like the Chinaman, bread and onions like the Spaniard, wheat like the Roman soldier, and milk like the healthful babe. And in winter they would eat corn like the Indian, black bread like the London porter, fat like the Esquimau, oats like the Scotchman, fish and oysters like the denizens of the sea, eggs and chickens like the happy negro; and they would take only so much lean and stimulating meats as would enable them to perform their mental tasks in an earnest and healthful manner.

The most active and successful brain workers in this country at the present time are those who pay particular attention to their daily diet. Chauncey M. Depew, the great after-dinner magician of eloquence, begins a day of incessant toil with eggs and toasted bread, and milk, and baked potatoes. At the numerous great dinners which he graces with his presence, and electrifies the guests by his speech, he eats but a few of the plainest and most substantial dishes. Jay Gould, the modern Crœsus, has subsisted in the main for years upon a plain diet of grain foods and vegetables, and a common baked potato is his favorite article of nutrition. Prince and pauper may live happily and healthfully upon the universal potato.

Now to those who are already, by unwise habits of eating, drinking, and working, the victims of nervousness or nerve exhaustion, it is proper to suggest these important facts: lean meat stimulates, fat meat relieves nervous erethism; vegetables sustain life in a moderate and healthful manner; fruit cools and purifies the blood, and aids in making the general system pure; grain foods and milk nourish, upbuild, and recuperate all the life forces.

By making a wise selection of the various foods which come within our reach, we may be able to relieve the unfortunate conditions and tendencies which exist in the brain workers of the present time in this land. We should remember, with Fothergill, and sug-

gest to each other and to our patients the propriety of using, for the recharging and revivifying of the exhausted nervous system, such articles of food as fish and butter, oysters stewed in milk, milk pudding, cream with seltzer water, or cream without seltzer water, oil emulsions, yolks of eggs and sherry, salads with oil, stewed sweet fruit with cream. Nervous people should eat fat food. Every irritable and exhaustive nerve should, if possible, be coated with fat. Fat is to a tender nerve what an air cushion is to a tired invalid; it eases jolts wonderfully. With the fat should be combined grain foods and vegetables for strength, and fruits to keep up a healthful and judicious consistency of the blood.

All foods should be garnished with the oil of good-nature, since anger and irritability tend to the production of indigestion; and the rational brain worker will avoid the gall and wormwood of ill-temper, even as the devil shuns holy water. It is wise to remember that "a merry heart doeth good like a medicine."

With regard to nutrition in the treatment of the insane, our experience has demonstrated its incalculable importance. It is thought by some that Dr. Hahnemann's success in the treatment of the sick was due, to a considerable extent, to the extreme care with which he watched and directed the diet of his patients.

We find that an abundance of appropriate food is a prime necessity in the treatment and cure of the insane. Almost every mental invalid is at the outset a victim of impaired nutrition, and of bodily waste, as well as mental weakness. Therefore, our first aim in the cure of such patients is to effect a bodily gain by means of suitable nutrition, and the indicated homœopathic remedy. Without the proper remedy, the work of assimilation cannot be easily inaugurated; and without suitable nutrition, the action of a remedy is weak and uncertain.

As an illustration of rapid gain by means of abundant nutrition, we present, very briefly, the following case:

No. 747 was admitted to the Middletown Asylum, December 3d, 1879. The case was one of melancholia, and the record states that in May, 1877, she commenced to go to church every morning, and then suddenly stopped, and since that time she has not spoken to any one, and has done no work for the past two and a half years. When brought to the asylum, the change of scene and surroundings seemed temporarily to act as a stimulus, and she conversed quite

of the Puritar[illegible] [illegible] relapsed into a sullen, and
fat of the sea[illegible] [illegible] she refused to eat. Conse-
the blizzard [illegible] [illegible] on milk and beef tea, with a
South sub[illegible] [illegible] of all the liquid food that could be
from riv[illegible] [illegible] until on the 6th of April, 1881,
mental [illegible] [illegible] pounds. On that date she began to talk,
No[illegible] [illegible] that time on she ate large quantities of
their [illegible] [illegible] potatoes, eggs, and such other food as her
mi[illegible] [illegible] This patient had an enormous appetite,
f[illegible] [illegible] seemed to agree with her perfectly, we
[illegible] liberal. She would eat from five to seven
[illegible] day, and drank three quarts of milk, and other
[illegible] proportions. In one month she
[illegible] pounds. On the 6th of April, 1881, she weighed
[illegible] pounds, and on the 20th of June when discharged as re-
[illegible] and healthy for the past seven years.
[illegible] of recovery from insanity the patient is found
[illegible] in bodily weight. The exceptions to this rule are
[illegible] recurrent mania. Such cases do not lose much during the
[illegible] much when they recover.

The insane who are recovering should use large quantities of milk, plenty of beef tea, toasted bread, baked potatoes, eggs, fat bacon, green vegetables, such as lettuce and onions, fish, oysters, wheat, oats, and rice, and such other articles as the patient seems to crave.

In pushing nutrition to its utmost in the cure of the insane, care must be taken, while the patient gains in flesh, to afford enough mental stimulus, by diversion, and careful attention to the rules of mental hygiene, to prevent the patient from passing into the dull and listless apathy of dementia.

A long experience and a careful observation have convinced us of the necessity for an abundant and appropriate nourishment of the body in order to provoke anew the mental activities which have been disturbed or impaired by insanity.

In the early aristocracy of that land which has been justly styled "the home of Presidents," the letters F. F. V. were symbolic of the First Families of Virginia. In that Arcadian land of health and

happiness to which we all aspire, there will be a new aristocracy which may be designated by the same letters as those which symbolize the old; but the letters will have a new significance. The F. F. V.'s of the rising future will be the apostles, the disciples, and the advocates of Fat, Fun, and Virility. Under the new regime, development will be more sure, strength of body and mind will be more lasting, and premature decay will be among the things of the past. Human life will be prolonged, human usefulness will be enlarged, and the intellectual powers of our race will rise to grander and nobler proportions. When these things come to pass by the acceptance and use of suitable nutrition for the brain-working masses, then there will be an almost universal "survival of the fittest;" then intellectual giants will be less rare than now, and the wonder excited by the presence of a few mental prodigies will subside. Then intellectual strength and vigor will become so common, and the cause for such strength will be so apparent, that Cassius will no longer ask:

> "Upon what meat doth this our Cæsar feed,
> That he is grown so great?"

NUTRITION IN RELATION TO MENTAL AND NERVOUS DISEASES.

By S. Lilienthal, M.D., San Francisco, Cal.

Our worthy chairman desires the Fellows of the psychological bureau to answer this important question, and thus open the etiology of these diseases before our mind. When mental and bodily nutrition is normal, where life runs the even tenor of its way, where nothing interferes to bring deterioration in the system, the normal hundred years of a human life ought to be attainable, and as perpetual motion has not yet been discovered, the wheels of life give out and a painless removal can be anticipated. What then are the causes of malnutrition, of psychical and somatic neurasthenia, and what can be done to check this ever-increasing flood which engulfs so many of our fellow beings?

Mens sana in corpore sano, and for that purpose we need good circulating media, good healthy blood, normal in its diverse constituents, and good sound nerve fluid, so that the heart can keep up its unceasing action, so that the blood distributes pabulum suitable to each and every organ, so that the different organs are able to perform their functions of importation and exportation, so that nutrition, assimilation, secretion and excretion are carried on normally and unconsciously, so that the nervous system from its highest centre to the lowest ganglion works with pleasure, that its needed rest is just the incentive for rational labor, and day by day, and year after year prayers ascend to the Giver of all good, when so many blessings are vouchsafed to man during this pilgrimage on earth.

Why can these blessings not be enjoyed by every living being? Schuele in his classical work on mental diseases tries to explain it in so far as the psyche is concerned, but to understand it more thoroughly let us also study the works of Arndt, of our own Beard and Mitchell, and let us mitigate, even if we cannot entirely remove, this cancer

spot, which with its twin sister, tuberculosis, threatens to make sad havoc with our population. These are questions which not only interest the physician, but need just as much the political economist for their solution and for their salvation. It is just as much a subject for legislative meditation, for its interest is universal, and when our legislators ever become statesmen, instead of being more or less politicians, then we may hope that the millenium is at hand. But alas! they suffer themselves too much from the sins of our century, and still the work moves on.

Schuele begins his fourteenth chapter with the momentous question, *Is our civilization to blame* for this mental neurasthenia? Griesinger and Maudsley acknowledge it, and blame for that civilization that it is more or less the cause of the dissatisfaction which has taken hold of nine-tenths of the population, and where everybody wants to be on the top of the ladder, and, as there is not room enough for so many, how few achieve the desired result! This very dissatisfaction, this very envy, procreates depressing emotions with its dire consequences. It is not mere overwork by day and too often during the hours which ought to be devoted to rest and building up; it is not the over-exertion of steady labor without flagging one day in the week, which is the cause of the ever-increasing dementia paralytica of our age, but it is the constant worry, worry, worry, which undermines soul and body. How can nutrition prosper in a body where malnutrition holds full sway. We agree with Maudsley when he warns that from such a dissatisfied and eager hunter after worldly possessions, healthy children cannot be expected—and with this desire for lucre he transmits to his progeny a neurasthenic body and a mind weak and stunted, unable to cope with the duties of civilization. But it is not only the laboring masses, who, inspired by the steady hope to improve their condition, suffer from these effects of worry; we see it just as much in the so-called higher classes, and the more they roll up their millions, the more they want, the top of the ladder must be reached, so that they may become the envy of their less fortunate money-hunters, and worry, here and there, destroys soul and body. Just ask the ladies (they would consider themslves disgraced to be called women), whether fashion is not a hard taskmaster; whether society, as it is called, is not a vulgar tyrant; and envy and worry rule just as much the privileged classes, and few of

its devotees can stand the self-imposed task, and disease and death claims its victims.

But let us begin at the beginning, and envy and worry are already found in our growing-up children. Education is a good thing, if rightfully employed; but he who ever invented examination ought to be condemned to an everlasting cramming. There is too much red tape yet in our school system, and to get the children out of school at an early age, in order to earn money, they are sent to school at an age when the brain is still in its infancy and the body undeveloped. Studies are forced upon them, which they are unable to understand, but still the lesson must be learned, else promotion is forfeited. How can that body be strengthened; how in those young ladies (girls are out of fashion), can the function of puberty be normally developed, when their whole nervous energy is exhausted by useless studies (forgotten as soon as school-years are over), and by forcing them for hours after school to sit in an unnatural position and exercise their fingers on that invention of the evil one, *vulgo* called piano? Even the workman's daughter must have the fashionable piano, though her mother tries to increase the little income by her steady work on the pedals of a sewing machine. Again worry in the young and in the old, and—the world still moves on.

When will we ever learn to discriminate between religion and sectarian tenets? Teach the child to love his heavenly Father and to look up to Him in love, but not in fear, as is too often done. What has that pure spirit of a child to do with confessions of sins and with the threat of hell and damnation? Instil such ideas in the young mind, and as it grows up to manhood or womanhood, the seeds sown in childhood may bear bitter fruits, and the so-called religious melancholia, activa or stupida, follows as a necessary sequela of a false education. What a misnomer to blame religion for our false and damnable education! We worry the young mind, and worry follows him all through life.

During the sieges of Strasburg and Paris, followed by the terrible acts of the commune, a fearful increase of insanity followed in 1870 and 1871. Certainly, no pleasant times in those cities then—mental worry and anxiety, want of food, unhealthy habitations—and the sequelæ were mental, often incurable, diseases or death before the allotted time. From our own internecine war we had the sad experience that more persons suffered from the effects of the war, than

from all the battles; and many a shattered constitution shows to-day the effects of the hardships and privations incidental to such conflicts.

But the most important factor remains still to be mentioned; "the influence of heredity," for defects of reason and control are transmitted as positively as external forms and peculiarities. In an article on Mental Responsibility in Inebriety (Med. Record, February 18, 1888), Dr. Crothers truly remarks: "A drinking and insane ancestry points to a direct entailment of mental degeneration and feebleness, and always a more or less unstable organism, unable to bear the strains and drains of life. A consumptive, epileptic, hysteric or odd, peculiar parentage is always followed by defective children, and where the ancestral degeneration dates farther back, it may be less prominent, but it is always a factor. An heredity associated with inebriety from neurotic ancestors gives strong indications of insanity and irresponsibility.

William Ireland, in his interesting work, "The blot upon the brain," page 158, teaches: In this sketch (of the royal family of Spain) we have traced a hereditary neurosis following a family for 350 years—sometimes passing over a generation—and appearing in various forms and intensities, as epilepsy, hypochondria, melancholia, mania and imbecility, till at length it extinguished the royal line of Spain. The baneful tendency in the blood was reinforced by close intermarriages with families of the same stock; and it is worthy of notice that the deterioration did not show itself so much in their illegitimate descendants. A man who is well made, strong, mentally gifted, and able to do much work and stand much strain, must be well born; and a race sodden with epilepsy, insanity and scrofula, whatever its fictitious rank, is necessarily low-born and in reality is not worth preserving.

"*The blot upon the brain,*"—how well this pithy sentence describes the derangement which must exist in this wonderful central nervous organ! *Below par* is the diagnosis, and the question necessarily arises, is it still a mere functional affection, which may be remedied far more by the patient himself, if he has will-power enough left to sin no more, or has it shown itself as an organic disease and thus passed the boundaries of restitution; in other words, can we still remedy a badly nourished and therefore badly-acting brain and make the descendants of our patients well-born, instead of being low-born and

a heavy load to the state and to the nation? Poor ministers to health! poor physicians! people ask too much of them, when the majority will continue to live in their sinful ways and still ask to be freed from the consequences thereof! Just as you sow, so shall you reap.

Arndt remarks in his work on neurasthenia that the physician will often recognize a neurasthenic state, where the patient considers himself or herself still in the possession of perfect health, and when the latter at last begins to find out that he is not the same any more as formerly, the former recognizes already the beginning of a, perhaps, incurable disease, and whether such a neuropathic disposition is acquired or an heirloom, the soil is given, from which grave nervous diseases will originate. With an imperfectly developed and imperfectly acting nervous system we usually find an imperfectly developed vascular system associated, the heart is small and its wall thin, and the same may be said of the whole aortic system, but the veins are large and thin-walled, and thus easily give rise to stagnations and œdema, as so often witnessed in neurasthenic patients. And as their capillary network is also well developed, but without strength, such people often cheat the beholder with their florid complexion, as if they were the very picture of health. The blood in such bloodvessels lacks that vitality necessary to a well-born being; it is watery, deficient in red blood-corpuscles and hæmoglobine, and how can such a circulating medium nourish the organs, and how can we expect such half-starved organs to perform their duties in the intricate machinery of the human organism?

What a few decades ago was known as spinal irritation and gave rise to many heated debates, is now better understood as the first stage of neurasthenia; it is the excited state of a worn-out nervous system, which still tries to do its duties, to overcome all obstacles; and the jaded system is too often urged on by stimulants to keep up the unequal race, and the second stage will surely be one of weakness, exhaustion and prostration. Our worst and most incurable nervous diseases have an insidious beginning, as locomotor ataxia or progressive paralysis of the insane, in fact they must be progressive, for the warning sound falls on deaf ears; and who would retire from this race for wealth or fame, as long as that quivering nervous system can be urged on to reach the goal? It is this false hope to evade the results, which keeps people up, as too often they apparently look well

and nobody would believe them that they are not so able any longer, to bear the strain of the exchange, or of fashion, as they were a few years ago. In fact, many a time they try to keep up the illusion to themselves; they still consider themselves hale and hearty and they fear to go to a physician, lest he might give them advice which they are unwilling and unable to follow. Even acquired neurasthenia is a chronic disease and the dogs which bite, never bark.

Can we restore a broken-down nervous system, and can we give good and healthy blood to a vitiated constitution? Morphine and Quinine, Coca and Malt preparations are daily prescribed and enrich the owners of these proprietary preparations, but they are mere palliatives; they keep off for a little while the dreaded finale, but it will come, except we are able to teach that sinner that this progressive deterioration must be stopped, that he must give one rest to the body and another rest to his mental powers and, perhaps, if not too late, some of his former vigor may be regained. But how is it with the hereditary environment? It were really laughable, if it were not such a mad mistake, to blame the poor spores with their myriads of names for all the ailments from which humanity suffers. How they enter the ovum has never yet been explained and we think that miracle will never be found out; and yet Hahnemann, a century ago, knew as much about hereditary influence, as we know at the present time with all our boasted scientific progress. The explanation which he gave of Psora, is certainly all wrong and his theorizing led him astray, but he hits the point when he says in section 80 of the Organon, "Psora is the only real fundamental cause and source of all other countless forms of disease, figuring at peculiar and definite diseases in books of pathology, under the names of nervous debility, hysteria, hypochondriasis, mania, melancholia, idiocy, madness, epilepsy and convulsions of all kinds; rachitis, scoliosis and kyphosis, caries of the bones, cancer," etc., and in looking at the action of his antipsorics we are astonished how clearly he individualized his cases of hereditary influences and found the remedies suitable to such cases, if applied persistently during infancy. Thus he recommends *Baryta carbonica* for children who do not grow, but pine away with swelling of glandular structures; the salts of lime are our great reliance in all states of depraved vitality and we give with full confidence our *Calcarea carb.* in all the different ailments belonging to the initial stages of tuberculosis and scrofulosis, or we may change

it to the Calcarea fluorica or phosphorica according to the individuality of the case.

Schüssler did well, when he insisted on prescribing the tissue remedies, for thus we go to the root of the evil, and may thus be enabled to rid the system of the incubus, which, like the sword of Damocles, constantly threatens to destroy its victim. It hardly pays to enumerate all our antipsorics; in Hahnemann's Chronic Diseases he bequeathed to us a mine, which is not half worked out.

There is hardly a remedy among the seven or eight hundred mentioned in our Materia Medica, which may not find its indication once in a while for some case of spinal irritation or its consequent neurasthenia, there is not an out-of-the-way symptom, which may not be the very thing which we were looking for, in a specific case and it would hardly pay to lose valuable time in their examination. My own repertory shows that I found most frequent indications, even in acquired cases, for the antipsorics in the higher potencies, often using at the same time the same drug in a very low potency, as a nutrition remedy. That hint comes from Grauvogl, and is a most valuable one and thus the combination or alternation of a high and a low potency of the same drug finds an easy solution. Our antipyretics, like Aconite, Gelsemium or Veratrum viride; our nervines, like Belladonna, Hyoscyamus, Stramonium, Opium or the Ophidians, will only in rare cases come into play, except with prescribers who prefer palliation to radical treatment.

I must beg pardon, our worthy chairman put the question, "Nutrition in mental and nervous diseases," and I have swayed away from the text and thought too much on malnutrition and how to remove it. But let us remove malnutrition and the healthy and vigorous nervous system will be able to accomplish all its functions.

THE GENERAL RELATION OF NUTRITION TO CONVULSION.

By A. P. Williamson, M.D., Middletown, N. Y.

The nomenclature of the diseases of the nervous system has been constantly undergoing changes ever since the days of Sir Charles Bell. Authorities still differ very greatly in regard to names which should be applied to certain forms of disease. The term convulsions is one which has been used to describe several widely different states of disease. Some use it to include all those manifestations of organically diseased or functionally disturbed conditions of the nervous system which are accompanied by either local or general spasmodic muscular contractions. Such an application of the term renders it very comprehensive, and would include such dissimilar forms of disease, as epilepsy, chorea and paralysis agitans, as well as reflex convulsions which arise from teething, over-distension of the stomach, etc., and also what may be denominated toxic convulsions, following the excessive use of alcohol, opium, etc. Other and equally weighty authorities use the term in a more restricted sense, and apply it only to "more or less general, purposeless, muscular contraction, occurring simultaneously and successively for a variable time."

We will, in our discussion of the subject, take the middle ground between these two opinions, and will define the term convulsion as that symptom of a functional or organic disturbance of the brain, which is characterized by prolonged, involuntary contractions of a muscle or a set of muscles.

Epilepsy, chorea, paralysis agitans, etc., are distinctive and specific diseases, while convulsion is only a symptom of these and some other diseases. Convulsion is invariably a symptom of the brain-irritation due to a "change in the nutritional processes of the nervous centres." This irritation always proceeds from one of two causes, which we will call centric and distal. By centric cause is meant that

the producing cause acts immediately upon the brain; while a distal cause is one which acts through some other organ, and affects the brain sympathetically.

The exact position of the so-called convulsive centres in the brain is also a mooted question among physiologists and pathologists. The weight of testimony, however, points to those centres of motion, located in the ascending frontal and ascending parietal convolutions, and to the vaso-motor centres located in the medulla oblongata.

Clinical experience has pointed out the important fact that when convulsions are due to an irritation in the cerebral cortex, unconsciousness is not necessarily an accompanying symptom; but, when the source of irritation is situated in the medulla oblongata, unconsciousness usually supervenes.

The centric causes which most frequently occasion the series of phenomena, denominated convulsions, are usually either some change in the blood-supply, of such a degree of severity as to produce nutritional disturbance, a change in the neuroglia of the cerebral mass, or meningeal inflammation and deposits.

First, let us consider the results which follow a change in the blood-supply. These are mainly of two kinds—anæmia and congestion.

Anæmia may be due to either an insufficiency in the blood-supply, or a deterioration in the quality of the blood. The quantity of blood sent to the brain for its nourishment may be too small by reason of a severe hemorrhage elsewhere, which has largely diminished the quantity in the general circulation, or the same result may follow the stoppage in the circulation by an embolic plug in an artery, thus depriving a certain brain-area of its nourishment. Local anæmia may supervene upon the exhibition of intense cold, which causes spasmodic contraction of the arterial coats.

The quality of the blood distributed to the cerebrum may be poor because of an excess of water, or an increase of white corpuscles. The same condition results, too, when the nutrient elements have been removed by disease, as in the case of morbus Brightii, when the albumen has been largely withdrawn.

Convulsions sometimes ensue when the lack of nourishing principle in the blood is due to the absence of food, as in starvation. Again, the quality of the blood may be deficient by reason of improper food, or because the digestive apparatus fails to correctly as-

similate the food, and prepare it for those changes which result in the manufacture of blood. Sometimes the blood fails to properly perform its function, because of the presence in it of certain toxic elements. These poisons may originate without or within the body. The most common of these are alcohol, opium, haschish and urea.

On the other hand, convulsions are frequently induced by a condition of the cerebral circulation exactly the opposite of the one we have just referred to, and there may be acting as a cause a congestion of the brain, that is, there is an excess of blood in the brain beyond the quantity required for its nourishment.

Cerebral congestions are less frequent, and do not last so long as anæmic states.

It is usually produced by some sudden severe physical effort, as when a violent muscular exertion is made while in a semi-recumbent position, straining at stool, or blowing wind instruments. It may follow too intense mental emotion.

Again, it has been caused by a failure of the veins to carry off the surplus blood, because of disease in the venous coats.

Convulsions are less rarely produced by a morbid condition of or in the neuroglia than by disturbance of the circulation. Convulsions do, however, often ensue when there is a tumor within the connective tissue of the brain. These tumors are usually of a cancerous nature, generally colloid. Syphilitic deposits are quite frequently seated in the neuroglia. Blood clots, the result of a hemorrhagic apoplexy, occasionally involve the neuroglia, and cause convulsions. The same may be said, too, of embolism or aneurismal dilatation of a large artery. And last, this formidable symptom may arise in consequence of an inflammation and thickening of the *pia mater*, if this is sufficiently severe to produce pressure upon the brain.

Distal or sympathetic causes are very numerous, but the ones which we meet most frequently are teething in infancy; over-distension of the stomach from gluttony; worms in the stomach or intestinal tract; menstrual disturbance from either ovarian or uterine disease, and injuries or diseases of the organs of special sense.

All these causes, both centric and distal, act only as exciting, immediate or producing ones; but, as they may present themselves without causing convulsions, there must be back of them, in order

that they be potent, a predisposition to neurotic diseases inherited from a weak, nervous ancestry.

The practical application of these facts comes in knowing how to prevent these causes acting pathologically. The only way so desirable an end can be accomplished, is by building up the weak body with proper food; by guarding and protecting it jealously from undue and improper strains, and by guiding the mind into healthy channels and away from unwise stimulation, which is frequently misnamed education.

A child, inheriting a predisposition to such morbid states, should receive a carefully devised diet, largely made up of easily digested vegetables, and a moderate amount of well-cooked meat. He should be required to exercise regularly, systematically and moderately, and the education of his mind ought not to commence until a solid foundation of good, physical health has been first laid. He should avoid all sudden emotions, those of joy as well as fear and grief.

In fact, a person who wishes to avoid the very distressing chain of symptoms, known as convulsions, must be always watchful and shun any and every condition—either mental or physical—which may lead, directly or indirectly, to a disturbance in the cerebral circulation which is likely to result in an interference with the nourishment of that most vital organ—the brain.

NUTRITION AND EPILEPSY.

By W. M. Butler, A.M., M.D., Brooklyn, N. Y.

No disease has proven more baffling and perplexing to its investigators than epilepsy. After centuries of experimentation upon the lower animals and the most careful and laborious study of its pathology, there still remains much diversity of opinion as to its anatomical lesions. Volumes might be filled by an enumeration of the different changes which have been found in the brains and spinal cords of the victims of this disease. Hence the theories promulgated as to its true nature have been about as numerous as the investigators who have devoted themselves to its study.

The most constant microscopical changes which have thus far been discovered, and by some of the best writers (Meyer, Nothnagel, Schroeder Van der Kolk and Echeverria) are considered essential to the disease, are found in the medulla oblongata, the cortical substance of the cerebrum, and the uppermost part of the cervical portion of the cord.

Brown-Séquard, by years of experimentation, has demonstrated that the spinal cord is a potent factor in the production of the disease, but whether the disease arises there, or the cord acts simply as a conductor of the nervous force which is elsewhere originated, has not yet been conclusively proven. In spite of the great amount of light that has been thrown upon the pathology of nervous disease by the labors of Ferrier, Hughlings Jackson, and others, in localizing the functions of different portions of the brain and spinal cord, they have all failed in demonstrating the essential character of the changes that take place in epilepsy. That some alteration occurs in the nutrition of the nerve cells at the base of the brain and the upper portion of the spinal cord, which gives rise to the "epileptic change," as Nothnagel terms it, there can be no doubt. As yet, however, this change has proven too occult for even the eye of the microscope.

Why, apparently, the same irritation should, in one child, produce a single convulsion, and in another a condition of the system in which numbers of convulsions for years recur at regular intervals, ultimately destroying body and mind, no pathologist has yet discovered. Some quantity, as yet unknown, undoubtedly enters into the problem of this disease, but one of the factors will be found in the general nutrition of the patient.

To the consideration of that portion of the problem, the relation of nutrition to epilepsy, we now invite your attention.

All writers are agreed in pronouncing heredity as the most powerful of all the predisposing causes of epilepsy. From 30 to 50 per cent. of all epileptics are found to be descendants of those who have suffered from epilepsy, insanity, or some one of the more severe neuroses. What is the cause of this? Why should this dread curse descend from father to son, generation after generation?

A glance at the general appearance of these sufferers suggests the reason. The dull, listless eye, malformed cranium and general bodily asymmetry reveal the continually increasing departure from the normal standard which has been going on for years in the nutrition of their ancestors. Its culmination has been reached in them. Its processes may be as far beyond the microscopic eye as the growth of the grass, but its results are plainly apparent.

The age at which epilepsy makes its first appearance, in the greatest majority of cases, is also suggestive of the intimate relationship which it bears to nutrition. Of 3803 cases, collected by different writers on the subject, in 2567 the attacks appeared before the twentieth year. While it is impossible to absolutely demonstrate the cause of its appearance at this time, the fact that the nutritive processes are most active during this period makes it highly probable that some disturbance in these processes is the cause of its great prevalence at this age.

That the disease is largely due to improper nourishment of the brain has been proven by experiments on the lower animals, where epilepsy has been artificially produced by the abstraction of blood. In women, also, not infrequently, has prolonged lactation, a severe metrorrhagia, or great loss of blood from hemorrhoids given rise to the disease.

The effects of masturbation and sexual excess in the production of the disease are due also to the depletion of the general system. To the same cause must be assigned the occurrence of epilepsy in so

many cases after severe attacks of scarlatina, typhoid fever and other exhausting diseases. The effect of depressed bone tumors and other growths in producing the disease is also undoubtedly due to the disturbance which they produce in the nutrition of large portions of the brain, and the interference with the production, reception and distribution of the normal nerve force.

The question whether certain general disturbances of nutrition, especially scrofula and rachitis, and particularly whether an impoverished, insufficient nourishment can produce epilepsy has elicited much discussion. Anstie has forcibly insisted that impoverished nourishment is an essential factor in the development of an "active hereditary nervousness." Echeverria, in accordance with several of the earlier investigators, is convinced that cachexia in the parents gives rise to epilepsy in the children. Hasse, in speaking of the disturbances of nutrition, says that they "not infrequently seem to bring about a predisposition in the presence of which proper exciting causes may lead to the outbreak of epilepsy."

The direct influence of the digestive organs in the production and continuance of the disease furnishes still further evidence of the truth of our proposition. The frequent occurrence of the first attack from overloading the stomach with fruit, and the invariable recurrence of the paroxysms from indiscretions in eating, are facts too well known to need any discussion. The ever present, ravenous appetite in every confirmed epileptic, in spite of the large amounts of food taken, proves the faultiness of the nutritive processes. Where the fault lies has not yet been revealed, but the food fails to satisfy and the stomach continually cries for more. Possessed by a merciless demon the poor epileptic in vain strives to meet the demands of the monster within, to be only the more heartlessly tortured in return. Feed him as he may, this hydra-headed devil appropriates it all to himself and the tissues starve. Brain, spinal cord, nerves and muscles cry out for their needed food, but unless this gourmand disease is cast out from their midst, their demands are unheeded and their wants unsupplied. Half starved for years, they imperfectly perform their work, until finally their forbearance comes to an end and they refuse to do more.

Another strong evidence of the close relationship existing between epilepsy and some disturbance of nutrition is found in the class of remedies most often curative in the disease. No one of any experience in our school, in the treatment of epilepsy, would think of getting

along without Argent. nit., Calc. carb., Cup., Silicea and Sulph. Yet the chief sphere of action of these drugs in the cure of disease lies in remedying the evils of malnutrition. Their numerous permanent cures of this disease, recorded by so many different authors since Hahnemann's time, emphasize more emphatically than words the effect of malnutrition in the production of epilepsy. The unmistakable benefit derived from these drugs in the treatment of epilepsy reveals the necessity of going beyond the mere symptoms of each paroxysm if we would succeed in permanently eradicating this dread malady. The history not only of the patient from his earliest childhood, but whatever taint may have been inherited from his ancestors, must be taken into consideration. We may not be able to detect the microscopic cell-perversions in each case, but the results in the gradually increasing perversion in the nutrition of his ancestors, culminating in the epileptic himself, can be discerned and must be remedied if the disease is to be eradicated.

The close relationship which we have found to exist between nutrition and epilepsy must have an important bearing upon the treatment and general management of the disease

One fact is certainly established in regard to epilepsy, that whatever treatment may be adopted no case can recover unless the most careful supervision is established over the diet. Not only the character of the food but its quantity and time of administration must be regulated. To a certain extent every patient is a law unto himself as to the kind of food which best agrees with him, and it is impossible to exactly define just what articles of food must be excluded from the epileptic's *menu*, but nothing difficult to digest and liable to irritate the digestive organs can be allowed. Nor is it less important that the amount of food should be considered. Driven by his ravenous appetite and the gnawing demands made by his impoverished system, the epileptic, unless restrained, will be sure to take such enormous quantities of food that, however easy of digestion it may be, the disease will be aggravated. Nor is it simply necessary to give general directions in regard to these restrictions; unless the physician continually urges upon the friends the necessity of constant, stringent oversight of the patient, his rules will be disregarded and his medical treatment partially or entirely nullified.

Another matter of great importance is the checking of all drains upon the system, which, by continued lowering of the nutrition of

the brain and cord, tend to more fully establish the epileptic change and render impossible an eradication of the convulsions.

Whether masturbation gives rise to the disease or not, it certainly tends to promote its continuance when it is practiced after the disease is established, and small results can be expected from treatment while the patient indulges this habit. Excessive leucorrhœas, menorrhagias of any sort, which continue to deplete the system, must be checked, and every means adopted for supplying the imperative nutritive demands of the nervous system.

Over-taxing the brain, also, by study or excessive mental labor of any kind, must be studiously avoided. While the brain need not lie utterly fallow, it cannot stand any severe mental strain. Under-fed, and to that extent weakened, it cannot endure with impunity the tax upon it which can readily be sustained by a healthy brain. While notable exceptions can be cited in Cæsar, Napoleon, Mohammed and a few others of the world's greatest intellects, we must regard them as exceptions. The brain of the ordinary epileptic is far below the normal standard of strength, and if it is ever to be improved must be carefully and judiciously treated.

Another thing which the epileptic must especially avoid is exposure of the head to severe heat.

Whether produced by the direct rays of the sun or artificial heat the effect of overheating the brain is always injurious and cannot be endured with impunity. The disturbance induced in the circulation of every brain by intense heat is greatly increased in the epileptic, where the nutrition is already markedly impaired, and if any improvement in the disease is desired it must be carefully avoided.

Another regulation which must be strictly insisted upon is the absolute prohibition of all alcoholic stimulants in every case of epilepsy. Reprehensible in all cases, in the epileptic this habit is doubly so. With the nutrition of the brain and cord impaired, the destructive processes are stimulated to ever increasing activity. Of the effects of alcohol on the nervous system Richardson says: "The brain and spinal cord and all the nervous matter, like other parts, become subject, under the influence of alcohol, to organic deterioration. The membranes enveloping the nervous substance undergo thickening; the bloodvessels are subjected to change of structure by which their resistance and resilience are impaired, and the true nervous matter is sometimes modified by softening or shrinking of its textures, by de-

generation of its cellular structure, or by interposition of fatty particles. . . . Two forms of nervous disease may ensue from this action of alcohol on the nervous organization. (The first of these is alcoholic epilepsy.)" Any attempts, therefore, to cure the disease while this habit is indulged would be manifestly futile.

Much remains to be accomplished in the fields of pathology and therapeutics before this dread disease shall be mastered and cease to be the *bete noir* of the physician and a terror to all mankind. Too much light cannot be thrown upon its occult workings and mysterious ravages. If by the study of its relation to nutrition we can enhance in the slightest degree our ability to counteract its ravages and overcome its power for evil, our work will not have been in vain.

THE POWER OF THOUGHT IN THE PRODUCTION AND CURE OF DISEASE.

By Wm. H. Holcombe, M.D., New Orleans, La.

The power of thought, the force of ideas, the influence of mind over matter and of the soul upon the body are expressions in common use, which indicate the general belief of men that our spiritual natures exercise some decided control over our physical surroundings.

There have been always some philosophers, from the Buddha of the Orient down to Emerson of our own day, who have grasped the transcendent idea, that thought is the only real power of the universe, and that all other powers and forces are, at the last analysis, the thoughts of God or of men in different forms and disguises. But the mass of mankind has never conceived of the influence of mind over matter except as an occasional, temporary, or partial phenomenon, quite inexplicable in itself, and based upon no organic relationship between the two spheres.

The strenuous protest of the intuitive life within us against the gross materialism which assails it; the rapid advance of modern thought in the scientific conception of the forms and forces of nature; and the evolution of new and startling phenomena upon many sides have prepared the public mind for a reconsideration of many a question. Idealism and realism are joining in mortal combat, and the children of the light need not fear the issue of their conflict with the powers of darkness.

How is it possible for thought to cause or to cure disease? What do we mean by the force of an idea, the power of thought? So far as we have learned anything about force, we know that it is the result of motion in a medium. Without substance or a medium, without parts or particles in that medium, and without motion, vibratory or otherwise, in the particles of that medium, we can have no

conception whatever of force. This is a fundamental truth in relation to the mechanics of sound, heat, light, electricity, magnetism and all the so-called forces of nature. Why should it be otherwise? indeed, how *can* it be otherwise with the spiritual forces which we call affections and thoughts? They, too, are undulations or vibrations among spiritual media.

Realism or naturalism teaches us that our affections and thoughts are the effects and products of the chemical actions and vibratory motions in the cortical cells of the brain. That such chemical actions and vibratory motions are necessary to the *manifestation* of our mental life, is true and is conceded; but they are themselves the effects, and not the causes, of the spiritual phenomena.

The materialistic theory requires us to believe that the cells of the gray substance of the brain and spinal cord, register every sensation, which is the ultimate basis of all thought, and keep these innumerable sensations, received every day and increasing throughout life, perpetually registered in such a manner, that all these ideas and complex thoughts connected with our own experiences may be recalled by memory and vivified at any moment. And as the cells of this gray matter are constantly dissolving down or disintegrating and new cells taking their place, it is necessary to believe also that each disappearing cell must in some way bequeath or transfer all its accumulated registrations to the new cell. What a complicated machine an old brain must be! bearing in its physical form, all the memory, intellect, will, affections, tempers and character of the man. This is obliged to be so, on the *material* theory of life, unless thoughts and affections are dissipated like smoke from a chimney, or like the exhalation from the lungs, as soon as they are created or secreted. And that they are not so dissipated is clear from the persistency and accumulativeness of all the phenomena of our spiritual life.

To suppose that thoughts and affections are produced by chemical action is as incomprehensible, absurd and incredible as it would be to suppose that a piano produces of itself all the music which emanates from it, and moreover that its keys still maintain within their structures all vibrations of all the tunes ever played upon it! There is nothing to be gained by this mad search for causes among innumerable series of phenomena which are themselves effects, the secret springs of which can never be detected by physical explora-

tions. The human mind, now in a more advanced state of evolution and enriched with all the results of modern discovery, is about to resume the *à priori* method, which was the source of the great wisdom of antiquity, and to push it into practical issues never dreamed of before.

The idealism of to-day is far more practical than the idealism of antiquity, because something like a scientific basis has been prepared for it. We have learned the nature and immutability of law, the indestructibility of either mind or matter, the laws of equilibrium, the latency of forces until called into action, their correlations, their transmutations into each other, the laws of undulations or vibrations, and the wonderful phenomena of magnetic and other inductions, by which actions are excited in bodies without any apparent contact or connection with other bodies. From the study of recognizable forces we have advanced to the contemplation of occult forces. By the hypothetical study of natural law in the spiritual world and of spiritual law in the natural world, we have been led to a knowledge of the analogies and correspondences between spiritual and natural things. To illustrate:

When Jesus said to the raging winds and waters, "Peace! be still," it seemed to the uneducated mind that there were no concealed links between the spoken word and the great calm which immediately ensued. But God works always by law and violates no principle. The great calm which existed in His own soul was reflected outwardly by successive degrees, as real and organic as the descending steps of a ladder, until natural forms and forces responded to it by a perfect repetition. Even so was it in every cure He made of disease. His own state of thought was reproduced in the interior mind of the sick by mental induction and the healing power, which is only the creative power or vital force passed outwards and downwards, reconstructing the tissues according to the models of health in the divine order.

Mind includes all forces. In other words, all the forces we conceive of, whether spiritual or natural, are at bottom, or on the last analysis, *Mind* in operation,—either the spirit of God in universal nature, or the human soul in its special domain. Heat is the divine love, light is the divine wisdom, in nature. All material objects are the outbirth and emblems of divine or of human thought. Nature is nothing in herself and of herself;

nothing but a mirror crowded with innumerable forms, changing like the figures of a kaleidoscope, all representative of spiritual things and their history. The soul of man is in everything of its body as God is in everything of the universe. And this is so because the soul is created in the image and likeness of God.

Therefore the eye does not see; the ear does not hear; the brain does not secrete thought; the chemical metamorphoses of the tissues do not produce emotional and intellectual phenomena. Entirely the reverse. The soul sees through the eye, hears through the ear, thinks through the brain, feels through the nerves, works through the blood, acts through the muscles, and constructs and governs the body after its own thoughts and for its own uses. The body is the soul externalized, the soul materialized. The soul builds the protoplasm into its own shapes, and then animates them for its own purposes. The organic cells of the body are only the type which the soul arranges into position, prints from them her eternal records and then scatters back into inanimate heaps again.

Physicians, and people generally, have long recognized the influence of the mind upon the body. Medical books and general literature abound in illustrations of the great truth formulated by Solomon, "*As a man thinketh in his heart, so is he;*" or of the more profound suggestions of Buddha, "Man and his surroundings are the complex resultant of all antecedent thought." And yet, while the power of mind is acknowledged, the universal and perpetual action of mind is not understood, or is ignored. It is regarded, indeed, as something exceptional, with the tacit assumption that as a general rule, the body executes all its functions by chemical or mechanical laws, without the necessary intervention of any mental influences whatever. A tremendous illusion! productive of the most disastrous results.

The root of this fallacy lies in the fact that we take no account of our *unconscious mind*, but following our sensations, suppose that our present conscious life of thinking and feeling is our real and only life. Whereas, in fact, the unconscious operations of the soul are almost infinite in comparison with the very small portion of mental life which comes at any one time within the range of our external consciousness. "This neuralgia could not have been the product of my thought," says one, "because I was not thinking of it nor fearing it in the least." Now diseases are not the products of our fleeting

external thoughts, but of the deep-seated errors and illusions which are planted in the unconscious mind.

The mind of man, of which he is not conscious, is constantly at work, silently pervading every tissue of his body by its vital influences, repeating itself in every function by induction from spiritual to corresponding natural forms; throbbing in the heart, breathing in the lungs, reflecting its own state in the blood, weaving its own forms into every act of nutrition, realizing its own life in every sensation and working its own will in every motion. The power of the mind over the body, indeed! There is no power in the body but the mind, for the body *is* the mind translated into flesh and blood.

When a limb is broken, the bones shattered, the flesh torn, the bloodvessels severed, the nerves lacerated, what can the surgeon or the doctor do to repair the injury? A little outside mechanical work. He ligates, he stitches, he plasters, he fixes the parts in apparatus, so they will remain motionless in the natural positions. The mind-power does the rest, the mind-power, which in one degree is affection and thought vibrating in the spiritual substance of a spiritual form, and in a lower corresponding degree becomes the electricities and magnetisms of nerve life, and, in a still lower degree, the chemical affinities and mechanical movements of the natural body. The soul which creates its frame, keeps it in health, restores it when diseased, and repairs it when injured. By her own occult forces, without our conscious perceptions, she regulates the movements of the blood, the development of nerve power and the chemical decompositions and recombinations going on in every tissue according to ideas implanted upon her by the divine mind—the Over-soul of the universe, in whom we live, move and have our being.

The unconscious mind of man is the real vital force—the real *vis medicatrix naturæ*, which always tends to bring every disease to a spontaneous recovery. How to remove the obstructions which prevent the operation of the mental forces and how to enlist them with scientific precision in behalf of the patient, is the greatest and profoundest of all therapeutic questions, and worthiest of the most ardent study of the true physician.

When one has grasped the idea, that by creative laws *mind* is dominant in all things of the body, the minutest changes of which are in reality organic manifestations or showings forth of mental conditions, many things before incomprehensible become clear. From

the standpoint of this grand truth, we see how emotions determine the most rapid changes in the secretions of the body, how fright turns the hair gray, how terror poisons the mother's milk, how great mental excitements or the slow torture of mental anxiety write their baneful effects upon the tissues of the frame, how the images made upon the mother's brain are transferred and photographed upon the body of the unborn child, how epidemics spread by the contagion of fear and the transference of thought, the thing feared in the mind being reproduced in the physical system.

On the idealistic theory, which is the basis of mind-cure, physical causes are only the external forms or natural embodiment of spiritual causes, which are the real motor-powers. Effects are produced, not by the apparent external means, but by the internal and corresponding spiritual means. When these internal spiritual forces can be evoked and set in action from within, the external means may be entirely dispensed with. It is therefore the maxim of the metaphysician that the causes and cure of disease are always mental.

The part which the mind has always played in the cure of disease has been ignored or not recognized, because of the prevalent and dominant spirit of materialism. The mind has been all along simply counted out, while in reality it may have been the chief and, perhaps, the only factor in the cure. When we are confronted with cures of the most remarkable character, cures entirely beyond the reach of our best medication, we attribute them to imagination, faith, hope and earnest expectation of results. And we do rightly—for imagination, faith, hope, expectation are states of the mind, are the mind itself in substantial activity and creative energy, and when these vital forces can be evoked and directed, there is no limit to the possibilities which lie in store for us.

In giving our drugs for specific purposes, we have had our thought too exclusively directed to the drugs and the physical condition of the patient. We have not taken into consideration what is going on in the mind of the sick man. Imagination, faith, hope, expectation have been silently, secretly, but actively at work in every case of cure from the beginning of time; alike in the mind of the most cultivated patient who visits the office of the most distinguished physician, and in the mind of the most squalid savage whose medicine-man is beating a drum and yelling and screeching in his ears to drive the evil spirit away. To be certain that drugs have ever

exerted *any* curative action whatever, it is necessary to eliminate every mental element of cure from the case. Let there be no opinion or thought about the matter, no faith, no imagination, no hope, no expectation of result. When all these causes are absent, the result may possibly be the effect of medicine.

We are apt to think that we possess this very crucial test in the cases of infants, animals, the sleeping, the idiotic, the delirious or the insane. We say to ourselves, surely here there is no imagination, hope, faith or expectation at play; these patients do not know what we are doing, nor have they the slightest thought upon the subject. We are mistaken. There are no exceptions to universal laws, and wherever there is organization and life, we may be sure that the organizing spirit is the one vital power in organic relation with all other spirits, and its hidden forces may be evoked by suitable means. To understand this, however, we have need of a true psychology.

Mind, the complex phenomena of affection and thought which we call mind, is infinite substance, uncreated and uncreatable, having no subjection to the laws of time or space. It always existed, and every living form in the universe is connected with it and has access to it. "There is a secret door," said Emerson, "in the inmost of every man's soul that leads out into the infinite." Man is a microcosm or miniature image of God and of the universe, because he has all potencies within himself and can be brought into rapport with all things. Evolution, development, growth, progress, individual or collective, is simply the unfolding or manifestation of the divine life. We live on surfaces and are conscious of the merest infinitesimal atom of the life which is within us and which will keep on manifesting itself through us to all eternity. This is equally true of the babe, or the idiot, or the insane, as it is of the greatest mind living.

Thoughts are things; ideas are forces; and the spiritual life is a transcendental organized sphere, of which the material cosmos around us is a reflection. Nothing stands alone—no soul, no mind, no thought, no faintest trace of an idea. All are associated and linked together by immutable laws. Every thought we think is a ray of mind which radiates from us and is reflected from all other minds in association with us. The transference of thought is as simple a thing in the mental sphere as the radiation and reflection of light are to the physical sphere. The mental solidarity of the race is perfect. All

the states of mind represented by faith, hope, imagination, fixed opinion, expectation, etc., may be exercised by the physician or by friends, and projected with more or less force and power upon the interior and unconscious mind of all who are supposed to be incapable of exercising mental powers of their own. This is the key-note to the sickness of children and also to the secret of their cure.

Recognizing the true relations between mind and matter and the creative power of the soul over the body, how are we to bring the power of thought to bear upon our patients in the cure of disease? By playing tricks upon their imaginations? by exciting their hopes or fears by false pretences? by imposing upon them with bread pills or sugar globules? by putting thermometers under their tongues? by pointing to their abdomens with colored rods? by enjoining peculiar exercises, or diet, or conduct? These things are all unworthy of the true physician. They are the resorts of quacks and pretenders, or at best, of novitiate experimenters in psychical phenomena.

The mind-cure, in its true sense, is something entirely different from this; something broader, grander, more scientific, more philosophical. It is not mere thought which cures. It is true thought, or *the truth*, which exhibits a wonderful sanative power. False thought, untruth, is the cause and the perpetuator of disease. As man, individual or collective, is the product of his thought, it follows by inexorable logic that his moral delinquencies, his diseases, his sufferings, his unhappy surroundings are all the effects of his sensory illusions, his self-deceptions, his false opinions, his wrong interpretations of phenomena and of the whole problem of life, his false philosophies, his false religions and his generally erroneous conceptions of his relations to God and to his fellow-men.

In ancient times the priest was also the physician, for it was then known that religion and science were soul and body which could not be sundered without injury to both. Apollo, the god of light and wisdom, the truth-bringer, was also the god of medicine. The word *doctor* means teacher. The medical profession should resume its original function. It should teach the people not only how to cure diseases, to antidote poisons and to escape the effects of their own misconduct, but it should teach them that high moral and mental sanitation which would make disease and suffering impossible. Truth is the one supreme force. The knowledge of it is power. Instruc-

tion in it is cure. Here lies a field, almost uncultivated, of transcendent promise.

There are sanitariums in this country in which disease is mainly treated by mental impressions. It is needless to say that the profession generally believes that such institutions are managed by "cranks." The man of advanced thought is always a "crank" to those who lag behind him. These men are pioneers in psychological medicine, rough and perhaps incompetent and inaccurate experimenters in mind-cure, but their methods and the results of them are well worth the study of the liberal and the conscientious physician. I have learned a great deal from a little book called "In Health," by Dr. A. J. Ingersoll, who has for many years managed a sanatarium at Corning, New York.

Dr. Ingersoll has grasped the great truth that spiritual states of the mind, errors of opinion, delusions, false interpretations of the problem of life, especially in regard to the sexual relation, are the most fruitful causes of disease. The bad health and morbid conditions, frequently engendered in male and female students in schools and colleges, are not fully explained by over-study, deficient hygiene and bad sanitation. It is the pride, envy, ambitions, dissatisfactions, selfishness, excitement and worry developed in the mad desire to excel others and carry off the prizes, which slowly but surely demoralize the spiritual nature, derange the nervous system, impair all the functions and lay the foundations of chronic disease.

Thus Dr. Ingersoll shows conclusively that the majority of uterine diseases, functional and organic, are produced by the mental states of the woman, intensified by the general concrete errors of her sex, reflected upon her mind from childhood. Her false ideas of chastity, her secret denunciation of God-given and sacred functions, her dislike and disgust for her own form and functions, especially her menstruation, her fear of motherhood, her selfish disinclination to bear children and her consequent concealment, hypocrisies, pretension and false ideas of the duties of life, are the prolific sources of her uterine troubles. These morbid states of mind flow down into the body as active causes dominating the whole corporeal sphere, and producing every variety and degree of disease.

Dr. Ingersoll emphasizes and proves the truth of his theories by the citation of cases of the most formidable character cured without a particle of medicine, by instruction, argument and reasoning, which

changed the false opinions, corrected the bad habits, and sent new currents of life-giving thought on their sanative errands throughout the body. Those patients who proved unimpressible and unteachable and who rejected the doctrine that a diseased body is the index of false thought, remained unbenefited in their diseased conditions.

It is not my intention in this paper to teach the principles and practice of mind-cure, but to call your attention to the subject, and offer some rational grounds for your belief in that system as a valuable part of practical medicine. I will further illustrate my meaning of the power of thought for good or evil by two cases which will bring the opposite systems—materialism and idealism—into striking and instructive contrast.

Some time ago I read a paper by Dr. Thomas, a distinguished gynæcologist of New York City, which made a painful impression upon my mind. His subject was the dangers and difficulties which attend parturition. He drew a dark and formidable picture. He said the habits, the moral and physical condition of the civilized woman were such, that every confinement should be regarded in the light of a capital operation in surgery. He enjoined the utmost hygienic precautions and the most energetic antiseptic treatment before, during and after the terrible event of childbirth! I venture to say that if one hundred pregnant women could have read his opinions and advice, ninety of them would have had the hardest, most painful and difficult labors on record. And the physicians who will accept his views will carry about them an atmosphere of anxiety and dread, which by reflection on the mind of the patient will create the very thing they fear.

In vivid contrast with these doleful scientific (?) prognostics, let us see how the mind-curers ensure happy pregnancies and speedy deliveries to their patients. They tell them: take no thought for the morrow, dismiss all fears and doubts and anxieties; entertain no pictures of suffering or danger in the mind, repudiate all but the most cheerful and hopeful conversation on the subject, declare firmly your belief that childbearing is a natural and orderly function, as simple as an evacuation of the bowels, that if there ever was any literal curse upon woman, it has all been removed by Jesus Christ who has destroyed the works of the Devil and delivered us from the bondage of the senses: that God is omnipresent and ever-present with us, that heaven is within ourselves, that all evil, disorderly and painful things

are shadows and phantoms of human creation, and that the fountains of life, health, peace and joy are not to be sought outside of us, but are within us perpetually ready to gush forth, so soon as the obstructions of ignorance and unbelief are removed from our minds. Women, who live and breathe in this beneficent atmosphere of thought, will pass through their pregnancies without fear, and through their confinement comparatively without pain. I have seen it and know it to be so.

Life, health, peace, happiness all depend upon truth or true thinking. "I am the way, the truth and the life," said Jesus, "He that believeth in me shall never die." And of the Christ, Paul uttered these mysterious words "Whom to know is life eternal." The sin, suffering and sickness of the world depend upon ignorance of truth or the repudiation and denial of it. These are the root-causes, away back of all the many proximate influences to which are attributable the disorders and miseries of mankind. The sublimest sanitation ever conceived of is to strike at these root-causes, these ubiquitous and primal errors, which obstruct and prevent the manifestations of the divine life in the race. Is such a thing possible?

If truth brings life and health, it is clear that all the religions and philosophies of the world must be teeming with errors. If they had taught the genuine, fundamental divine truth, the present state of mankind would be impossible. Every intuitive mind perceives that the words of Jesus Christ are divine truths, but his profoundest and most life-giving utterances have been ignored, misunderstood or misinterpreted and thereby totally shorn of their power, by even his best and wisest disciples. Our oneness with God and each other, our mastery in positive conditions over nature and disease, our power by the spoken word of truth to do the very works of the Master, these transcendent truths, have become mere myths and idle tales in the ears of the church.

The reason is easy to discover. It is the prevalence of naturalism and the material philosophy, the root of all falsities, and the consequent wrong interpretations of phenomena. The "letter which killeth" has determined the thought of the world. In literalism or naturalism there is no life, but the issues thereof are death. It is the water of the well of Samaria, "Whosoever drinketh of this water, said Christ, shall thirst again, but whosoever drinketh of the water that I shall give shall never thirst, but the water that I shall

give him shall be in him a well of water springing up into everlasting life."

The sole hope of the redemption of the world from moral and physical disorder is the advent of a new and spiritual philosophy, a genuine expression of divine truth, which shall revolutionize the theologies and sciences of man. Germs of that philosophy are to be found in all the transcendental and mystical writers from Plato to Emerson. They have been largely reinforced by the unfolding of the antique wisdom of the oriental world. But the whole body of it exists in the revelations of Emanuel Swedenborg, who will be found on close examination to be the highest and best authority on all spiritual subjects.

Medical science as it now stands is like an old silver mine nearly exhausted, the working of which is no longer profitable. The truths which are to save and cure are the truths of intuition—not to be discovered or even comprehended by the scientific faculties. A new mine has been opened. The product is pure gold, and all men are invited to share the rich inheritance.

These, Mr. President, are the best words I can say as one of the Committee on Psychological Medicine, to which Bureau I have been assigned.

MAN'S NERVOUS SYSTEM MODIFIED BY A CARNIVOROUS DIET.

By G. W. Bowen, M.D., Fort Wayne, Ind.

It is susceptible of demonstration that man can materially change his nature, disposition, and to a large extent his temperament, by a wise and judicious selection of the materials he uses as food, to not only sustain his system, but to replace with new material that which has served its purpose and can be of use to it no longer. As repairs are essential and must be made in and through digestion and a healthy assimilation, it becomes a matter of importance that the materials used should be of such a nature as will replace the loss sustained with as good or, if possible, a better material, so the structure will not only be sustained, but be an improvement on the old one. This by a judicious selection can be done.

Foods, to a certain extent, must be selected for the specific object in view; whether it be to rebuild tissues, compensate for losses, or to sustain the nervous system. Age and vocation are also matters of no mean importance.

He who elaborates mental thoughts needs elements for his sustenance radically different from him whose loss goes out through muscular activity. Again, those of less matured years may need material that would aid them in supplying the rapidly expanding muscular and osseous needs.

The American people are of all races endowed with a superabundance of nervous energy, not alone due to the climate, but mainly from the diet, so varied and rich in nerve-building material, and to our eternal action, prompted by the surrounding and ever rushing tide striving for supremacy.

That diet has more standing to its credit as cause, must be self-evident, even to a casual observer, for nowhere in the civilized world can the same boast be made, that the populace have such an abun-

dance of the main nutritious foods as here, and at such reasonable rates; nor can the means for its procurement be obtained so readily elsewhere. Calling to our aid, in the study of this subject, observations gleaned from the field of nature, we can see cause and effect in so many varied forms that we cannot fail to utilize the knowledge thus gained to help us to a closer scrutiny of the essential needs of man in his selection of foods, either for temporary or for permanent results. The arid air or soil attracts and absorbs moisture from all surroundings, obtainable when needed. So does the plant attract not only the clouds for moisture, but other elements needed for its existence and growth.

This we call elective affinity, or the selecting of what is essential. The animal economy is, by a wise provision of nature, endowed with the same ability to select what it needs or requires for the especial purpose of causing or securing the perfection of its type. But the human family, promenading the highest plateau, has more than the mere physical development to be considered; for it must be remembered that the lofty tower that pierces the earliest and latest rays of the genial sunshine must have a substantial basis for its support. So must the lasting genius of the developed brain draw its supply from its human shaft and supporting base. Meat eating animals are noted for their tenacity of life, their capability for self-protection, and their recuperative powers, unaided by the assistance of art in the repairs needed, if by some accidental circumstance an interruption to the natural and harmonious working of the animal economy, may befall them. That their system of diet gives them intelligence is not to be supposed, for it is a qualification, not essential, that it does contribute, sustain, and keep not only the muscular but the nervous system that controls them, in the most perfect and natural condition. Hence nervous affections cannot exist, as we may know and recognize them in the human race. This is not alone all the benefits we can glean from observations of the effect of diet from that class we designate as the carnivora; for still another and more important fact can be learned—one that has materially contributed to enhance my interest and enure to the benefit of others. Fevers, or a morbid elevation of the temperature, with its attendant ills, especially that of a ferment which may terminate in a local decomposition, is almost an unknown event in that class of animals as in birds of prey. Were

observations only extended to our domesticated animals of the canine and feline races, a confirmation of the fact can be obtained.

Men who for years have made it their especial business to secure and exhibit the highest type of wild animals of that class, assure me of this being a reliable assertion; for even after fracture or violent contusions the repairs are easily and speedily made without the intervention of fevers or subsequent suppuration. True, many of that class may die from the deprivation of air and exercise that to them is so essentially necessary.

Observations, made through many years, have led me to be thoroughly convinced that those three unfortunate conditions can be obviated and their ill-effects avoided, viz., exercise, nervous irritation, inflammation, and suppuration, and in their place we get spontaneous recuperation from injuries.

Patients of nervous diathesis, so much so as to make not only their own existence but that of those around them, almost a burden, have had their excessive nervous irritability hushed into repose, or brought under subjection until they can submit to an operation without a murmur, that before would have been almost equivalent to death itself. Operations when made have not been followed by fever or inflammation in those who have made meat a cardinal article of diet. In fractures, especially of a grave nature, the results have been so marked that even the most unobserving have been compelled to observe the escapement of not only *calor* and *rubor*, but *dolor*. True, the judicious use of our medicines have aided materially in the surprising results.

Not alone from others have these observations confirmatory been obtained, but also in my own person; for the misfortune has befallen me of having four bones fractured, and at different times, in all of which the results of suppuration needed no attention except to keep the replaced bones in proper position.

The question must arise, how can the nervous system be developed to the highest possible condition, so it can always be subservient to the will of man, and not give him trouble from its super-excitation?

If this can be accomplished, and the physical structure held at its highest point of activity, and yet retain that one desired object,—perfect health—then the sum of our sublunary happiness ought to be considered as achieved.

Observations must confirm us in the belief that a mixed and varied

diet of farinaceous foods tends to disturb the equanimity of the gastric nerves, from whence its radiating influence is so liable to affect the whole nervous system.

If, by a return to a more primitive and simpler diet, and one whose cardinal elements are capable of making all necessary repairs to the mechanical structure, and endow the nervous system with not only strength for all necessary action, but keep it in a passivity of repose, so much so as to avoid and escape the acquisition of that unfortunate condition we designate as a nervous diathesis, then will we be entitled to the credit of having contributed materially to the sum of human happiness. This should be our object and aim, and from our vocation, that of a sense of duty.

Having for years made meat (principally beef) the main article of diet, and been almost totally unconscious of pain, and having seen like results in others who have adopted that article as a main nutriment, I have felt it to be a duty to urge and advise others to thus live, and escape those annoyances that may arise from pressure on, or irritability of, the nervous system.

All forms of meat have been recommended and advised, save and except the scrofulous-producing, polypoid porcine, that alone being peculiarly and positively objectionable.

Discussion.

A. S. Couch, M.D.: Those who have few opportunities to study the conditions involved in psychological discussions must have learned some things from the reading of Dr. Talcott's paper, at least I have done so. The first one is the endorsement of the position of Fothergill that the extreme and high nervous constitution which he speaks of in certain conditions of diet, is the result of the diet, instead of the constitutional tendency of the patient being *to feed that way*. The second, is that if we would go back and live as our forefathers did, we would live to be 120 years old. The third, is that the Romans conquered the rest of the world because they ate wheat, which would lead us to think that if they had not done so and the rest of the world had, they would have been conquered instead.

Inasmuch as we can learn from the psychological bureau so many things, I would like to ask Dr. Kinne two questions: Inasmuch as he said that certain states are under the control of the will, will he kindly define that term. He said that the brain was certainly the whole seat of mental action. How did he ascertain that fact?

E. O. KINNE, M.D.: I do not know. To ask questions is easier than answering them.

Dr. Couch misunderstands me, if he thinks I limit mental action to the brain; I did not intend to so express myself.

A. J. FRENCH, M.D.: I am very much interested in this report of the Bureau of Psychological Medicine; I cannot believe that these conditions are caused by malnutrition. It has been said that mind and body cannot be separated so as to identify the character of either independently of the other; I think we must take man as a physical being and identify what spiritual character he has with the body; we only know the character of a man by his psychological manifestations through his physical organism; the conditions of the latter qualify very much the expressions of the former. I have no means to judge of the spiritual character only as manifested through the physical. If a man comes before me in an excited irritable state of mind with an empty stomach, and a diseased body if you please, having gone a long time without food or sleep, he does not present to me a normal mind, he appears like a distorted sort of character. Abstractly his mind is not affected by his physical condition, only its manifestations through an abnormal body. If he is normal in his physical condition, his mind appears normal. I have no idea that abstractly we can by any treatment change the character of the man through the body. Therefore I decline to believe that there is much (if any) difference between us as individuals, after all, in the abstract operation of the mind. The difference consists in a perfect physical organism supplemented with good care and education. Take Daniel Webster as an illustration of a great mind, he was a man of most perfect physical development, he had a large body, strong nervous system and a happy combination of the temperaments. He presented a splendid physical figure.

Take another person just the opposite—born of weak parents—poor muscular development, weak nervous system and all the physical characteristics in proportion. Now has he not as much mind abstractly given him by the Creator as Daniel Webster? I believe that we inherit defective organisms and that no remedy, no nutrition, can affect it. I read a paper before the Massachusetts Homœopathic Society in Boston upon the subject of treating uterine diseases psychologically. I was much surprised on looking up the subject to find the facts that show the influence of the mind on that class of diseases, so that I believe that many of them are functional, and that a very large class that are treated medically and with local treatment, should come properly under the head of psychological treatment. Dr. Tuke, a celebrated English physician, tells of an incident of a small child whose fingers were crushed by a falling window. The mother was lying upon the sofa, she became so frightened that her three corresponding fingers became inflamed, and required surgical

dressing, illustrating most strikingly the physical effect from psychological influences and the power of the inagination.

We are all aware of the power of the imagination in the treatment of diseases. Many physicians' success depends more upon their presence in the sick room inspiring hope, imparting good cheer, than upon their prescriptions—confidence in the doctor gives a wonderful inspiration to the mind of the patient. On the contrary, going into the sick-room with a funereal look, grave demeanor and down-cast expression will do more harm than medicine will do good. I was much interested in what Dr. Talcott has said, I have seen enough to make me believe that we can do a wonderful amount of good, and save our patients much suffering if we would make medical treatment secondary to hygienic and psychological.

A. S. Couch, M.D.: These papers should carry along with them a definition of the terms used, in order that we may come to a satisfactory understanding.

J. D. Buck, M.D.: I agree with Dr. Couch exactly. He has touched the true keynote. Possibly all of us are in the habit of using terms to which we attach no meaning. Mind, thought and will are each of them names to which very definite meanings are not always attached. We should first very accurately define our terms, and this will tend to clear up our ideas which are often obscure and indefinite. Then we are ready to discuss principles.

REPORT

OF THE

BUREAU OF SANITARY SCIENCE.

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INFLUENCE OF ICE AND ITS IMPURITIES IN DISEASE.

By H. E. Beebe, M.D., Sidney, Ohio.

The use of ice in summer for domestic purposes has become so general, that it may now be considered one of the necessaries of life. Its use in cities has increased until there are very few persons who do not depend upon it to some extent: either for drinking purposes or to preserve for a short time various articles of food; while in the country, ice-houses are becoming more numerous every year. The question of purity then becomes one of vital importance.

With their usual tenacious adherence to error and superstition, a majority of people hold to a firm belief in the theory that water in freezing mechanically rids itself of all impurities, and that ice must therefore, no matter from what source, be free from the dangers attributable to polluted water.

But the fallacy of this has been exposed by numerous experiments. A simple test has been made by the writer, which any one can essay for himself. A pond, depending for its supply altogether upon rain

* Paper not received.—Editor.

and surface drainage, furnished ice for a farmer. During the summer, cows and hogs would spend a great part of every day in the water. Calling the owner's attention to this source of danger, or at least of impurity, he gave the usual formula "water always purifies when freezing." To convince him, a piece of ice was put into a clean bottle which was tightly corked, and set in the rays of an August sun, for some hours; on removing the cork a very distinct barn-yard odor was manifest. True, no sickness has resulted in this family that can be traced to the ice; but every physician is cognizant of numerous cases in which Providence allows the rural communities to thrive and flourish under gross violation of all hygienic requirements, such as would decimate a city in a single season.

Suppose that such a body of water be frozen to the bottom, or suppose it to be saturated with a soluble substance, partially frozen, and the resulting precipitation found to be less than the amount of water so frozen would contain if melted, as has been tried; in either case chemical analysis is unnecessary to show that the ice cannot be pure. It is possible for various hurtful substances, both organic and inorganic, to be included in this way. Of course, in winter that portion of water nearest the surface is least impure, unless in case of shallow or swift streams; and this, together with the undoubted fact that water does tend to disentangle foreign elements to a great extent when freezing, has given rise and support to the theory. But careful analysis has shown many impurities, and the microscope has shown another source of danger that chemistry does not detect—namely, the various forms of bacteria. These become sterile when dry; and in pure water they cannot live; in water only slightly impure they may not increase. But with moist surroundings, with decomposed animal or vegetable substance to feed upon, they develop with marvellous rapidity, each one under the most favorable conditions being able to increase by division and subdivision to seventeen millions in the course of twenty-four hours.

Experiment has shown that they are not removed by the most careful filtering. Boiling will always destroy them, but water thus treated must be oxygenated before being good for drinking, and the chances are that in this process germs may be introduced as harmful as those removed.

Freezing does not kill them, for Dr. Prudden has found twenty thousand living bacteria in a single cubic centimeter (about one-third

of a teaspoonful) of ice. In one case not all the bacteria were killed after freezing one hundred and three days; in another, large numbers were found in a piece of ice which had been in a solid state for eleven months.

It is settled beyond dispute that the germs of typhoid and other fevers are carried to a large extent, if not almost wholly, in water, and these germs were the most abundant in the ice examined by Dr. Prudden; while epidemics of diphtheria are due to the same cause.

Nor does the danger lie only in small or stagnant bodies of water; the use of ice from Onondaga Lake was forbidden in Syracuse by the City Board of Health, and in the discussion that ensued the fact was brought out that such ice was charged with various disease-producing germs brought in with Syracuse sewage. The ice from Hudson River below Albany has been proven dangerous from a similar cause.

Pengra found that 100 cubic centimeters of water, containing .83 gramme of urea, still contained .50 gramme when frozen.

Similar results followed with the use of grape sugar, albumen, and colloids. In these experiments, as in Dr. Prudden's, it was found that the upper portions of the ice were less charged than the lower.

Certainly such impure ice may be used for years with no evil result; so may water or any other disease-bearing substance. Developments follow only when the conditions are favorable, which is more apt to be the case with an invalid than with a person in good health.

It may, in view of these facts, be stated as an axiom that ice from water that is not safe in its fluid state should never be used for drinking purposes. Localities not favored by the near presence of pure water, whence their supplies may be drawn at moderate expense, must depend upon ice made artificially from distilled water. This has other advantages, besides safety, over natural ice that must be hauled a considerable distance. It can always be uniform in texture (loose or "snow" ice is far worse than solid ice to convey disease), frozen in blocks of convenient size for handling; there need be no wastage, or but very little; the cost of freight and enhanced price due to loss in transit is avoided. It can be produced, when the demand is sufficient to justify a considerable outlay for a plant, at a lower price than lake ice can be sold for at any considerable distance from the point of supply.

When persons must use such as they can get, and not such as they

would like, two rules should be observed: First, never bring ice in direct contact with meat, vegetables, and such things, but use it to reduce the temperature of the space in which they are placed. Second, never put ice in drinking water, but the reverse; put the water in bottles or jars, and surround it with ice. It is easy to construct a cooler on this principle which will be as convenient as the kind now in use.

It goes without saying, that in surgery no ice is to be brought in contact with the wounded flesh unless its absolute purity is beyond all question. If such cannot be obtained it is best to rely upon other means.

Every summer the word goes the rounds in the newspapers—"Do not drink very cold water rapidly, or when heated;" and just as regularly do we hear of sickness, or even death, from this cause. Water at a temperature of about 40 degrees quenches the thirst more quickly than if colder, and can cause no injury or inconvenience unless used to a degree far beyond what is necessary.

LIGHT IN ITS RELATION TO DISEASE.

By Theo. Y. Kinne, M.D., Paterson, N. J.

In looking at light as a subject for discussion we find a theme as wide as the universe, and in length only measured by infinity. From the earliest dawn of creation, when the Omnipotent fiat was first uttered, till the hour when, as we are told, "there shall be no night there," we see this subtle, all-pervading agent exerting an influence second to none other of the natural forces. Should I attempt to give a resumé of what has been said and written on the use and abuse of natural light as a remedial agent, my ears would be saluted with the word which, in modern parlance, is equivalent to that of "a twice-told tale." So all that comes to us from other worlds is to be eliminated from our problem. Why? Because the natural light is essentially pure. Whether it seeks the soiled and sin-stained haunts of poverty, floods the palaces of Dives, or bathes in splendor the vaulted aisles of our cathedrals, its contact tends to purification, and, be it less or more, from its effects no evil can result. Man has discovered and applied many substitutes by which his days may be lengthened and his opportunities increased. Even here there is a long range from the tallow candle of our ancestors to the electric beacons with which our children will girdle the globe. Civilization has removed us from the first by near a generation's span, and the last is of so recent origin as not to furnish sufficient data for our examination. Striking out these two extremes we have petroleum and its relatives and illuminating gas as variously produced. Gas is made by distillation of either wood, petroleum, coal, or water and naphtha. All depend upon the relative amount of olefiant gas and hydrocarbons contained, and all are dangerous in proportion to the quantity of carbonic acid and carbonic oxide allowed to remain through imperfect purification. While carbonic acid gas, like nitrogen and hydrogen, is irrespirable and a non-supporter of life, car-

bonic oxide gas is more—it is a deadly poison. Experiments in producing gas from wood have shown that, while its illuminating power through the hydrocarbons is double that of ordinary coal gas, its poisonous effects are six times greater. The danger can be more clearly understood if we remember the quick and deadly effect following the inhalation of charcoal fumes. To state the case more definitely, we find in all manufactured gases these constituents ever present: Hydrocarbons, marsh gas, olefiant gas, carbonic acid, carbonic oxide.

I have omitted the other gases, which are unimportant. Of these, only the carbonic oxide is a positive poison. Its toxic symptoms are languor, drowsiness, loss of motion and sensibility, convulsions, collapse, stupor, death. In the various gases manufactured we find the proportion of carbonic oxide as follows:

	Per cent.
Petroleum gas,	.03
Coal gas,	.07
Water gas,	.28
Wood gas,	.40

And the illuminating power is inversely proportional. You ask, What is the danger when these gases are undergoing combustion? I answer, none, if the process be perfect. But there may be much if the pressure is too great at the burner. Again, as the oxide is a non-illuminant, its percentage being great, a larger flow of gas is required to furnish the requisite amount of light. Besides, it is more easily extinguished by currents of air. The greatest danger lies in leakage from the mains and service pipes. Finding its way into the cellars and basements of houses it produces sicknesses, the cause of which is often mysterious and puzzles the attending physician. It is a notorious fact that, while no trace of gas may be detected in the street, the adjacent cellars are filled with it. The withered leaves and dying limbs of noble shade trees attest its deadly presence.

Experiments made in passing gas through different substances have shown no appreciable change in the noxious constituents, except when the hydrocarbons were diminished, and consequently the odor was lessened. In cities where water gas is used the casualties have been so frequent that in some hotels placards are posted warning guests to be careful in extinguishing lights, and precautions are taken by having special openings made into rooms, so that the escape of gas can be detected by watchmen detailed for that purpose.

In three cities—New York, Brooklyn, and Baltimore—the average annual deaths from gas in the past eight years have been fifteen, and for the entire country twenty-six. So patent are these facts that, in some States, stringent laws have been passed inflicting severe penalties upon companies found supplying gas containing more than 10 per cent. of carbonic oxide gas. In my own State, New Jersey, there was such a law, but through the efforts of the companies it was nullified, and now we have no protection. I venture the assertion that were such laws in force a large proportion of our gas companies would be compelled to change their methods. There is no need of my elaborating the processes for making gas, for they are known to all who have interested themselves in this matter.

The comparative number of deaths caused by the different gases would be an interesting study, but I will simply say that, in the minds of many, carbonic acid gets credit for what its cousin, the oxide, does. While electricity is blamed, and justly, for the casualties caused by imperfect insulation, still the number is far exceeded by those from impure gas.

Now, looking at Petroleum and its derivatives, Kerosene, Naphtha, Benzine, and the Benzoles, what do we find? As I have shown, the death-dealing constituents are at a minimum, and yet there is a menace to health of which we should not lose sight. Petroleum gas is comparatively innocuous. With kerosene, the common illuminant, we have chiefly to deal. We recognize its excellence; our servants know its usefulness in kindling fires, and sometimes feel its force.

With its misuse we, as medical men, are mainly concerned. When the lamp is "turned down," till the dim, religious light serves to make the darkness more visible, comes the condition which often gives *us* something to do. The gases evolved with the floating particles of carbon become active irritants to the air-passages of all who breathe the impregnated atmosphere. I recall cases of persistent and recurring follicular tonsillitis, which vexed me sorely till I discovered the exciting cause. Called in the night to one of the worst cases I ever dealt with, I found the air surcharged with the vapors of kerosene oil and smoke. Upon questioning, I learned "the dear boy could not sleep without a light." Its banishment was ordered despite his cries, and there was never a recurrence of the disease.

Now my first thought and query is as to the character and use of

the artificial light. Passing through two severe epidemics of diphtheria I noted this fact: all cases of diphtheria, diphtheritic and follicular ulceration occurred where *kerosene* was burned; not one where gas was used. This may have been a coincidence, but nevertheless the fact remains. Since then I have noticed the severer local symptoms with kerosene, but the greater mortality with gas. I may mention that since the great epidemic of 1873 the kind of gas made has been changed from coal to what is termed water-gas. Let me ask you each to investigate for yourself, and report either for or against my own conclusions.

The limit to this paper has prevented proof of assertions made, but if these notes of warning shall make us more attentive to what is done in our midst I shall have accomplished all I hoped. By our position and profession we are the conservers and preservers of the public weal, and by thoughtful care we shall perpetuate what we cannot restore. Close scrutiny and rigid investigation will check men in their schemes for personal aggrandizement, and we shall merit as well as receive the thanks of the innocent and unsuspecting ones who entrust their all to our guardianship and care.

Discussion.

C. L. Cleveland, M.D.: In the burning of the ordinary coal-gas, with a good burner, what percentage of injurious gas is evolved?

T. Y. Kinne, M.D.: I would say that in the ordinary coal-gas as formerly made it varies from $\frac{1}{8}$ per cent. of carbonic oxide gas down to a quantity almost imperceptible. There is another point with regard to carbonic oxide gas, and that is that its specific gravity is not so great as that of carbonic acid gas. The latter, having a greater specific gravity than air, would go to the lower part of the room, the carbonic oxide gas would be more equally distributed through the room than the acid gas. In New York city, Brooklyn and Baltimore they are using water-gas, while Massachusetts has prohibited the use of gas from this process. It has been interdicted in France, where it was first used, for the mortality became so much greater that, upon investigation, finding it due to the excess of carbonic oxide gas, they prohibited its use. It is this carbonic oxide which kills the workers in our blast and smelting furnaces. Numerous tests and experiments have been made by chemists, legislatures, boards of health and others establishing this fact—that, while the coal gas produced toxic symptoms in animals exposed to it, yet they

recovered when brought into the air; but from the carbonic oxide there was no recovery, it seemed to poison the system so thoroughly that death was inevitable. Comparative experiments have been made in New York, Glasgow and other cities, all giving the same results. Of course, those who use water-gas believe as some of the chemists say. Prof. Chandler, in his second examination of these tests, says that it is immaterial which form of gas is used, but I think he is the only one who does so.

E. C. PARSONS, M.D.: In the locality from which I come (Meadville, Pa.) we use the natural gas largely, and an important question with its use has been that of combustion in an imperfect manner. We had formerly used the bituminous coal, and as a result the flues were more or less choked with soot, which, from the intensely dry heat of the gas, was continually dropping and clogging the draft. We were often compelled to take down the stove-pipes and reclean the chimney, and again repeat it, otherwise the imperfect combustion was liable to cause an explosion. It requires no little attention when beginning the use of natural gas, where bituminous coal has formerly been used as fuel, to keep the chimneys open, for the gas as a fuel produces such an intense heat that particles of dried material will keep falling. We must be careful then about the closing up of these flues. I prefer to use the gas in open grates. I was especially interested in the reference to burning lamps. It is a pernicious habit to allow the burning of oil lamps in sleeping rooms. As to the case of the boy referred to, I think Causticum would have relieved him.

H. E. BEEBE, M.D.: It has been said by the physicians in my district that we are having more cases of bronchial and laryngeal irritation since its use began. What is Dr. Parsons' experience?

DR. PARSONS: This is undoubtedly true, but I do not think it is the gas so much as the dry heat which it produces. It is a cheap fuel, and families are in the habit of burning it night and day, and the rooms become excessively warm. As a result of this they take cold very easily. It is not the action of escaping gas on the mucous membrane of the larynx and bronchia, but this excessively dry, hot air of the living room.

DR. CLEVELAND: In regard to the best method of avoiding the impurities in ice, are there any improved filters for drinking purposes during the summer? As I understand Dr. Beebe's paper, it advised the placing of the ice on the outside and not in contact with the water. Are there any filters so arranged, or what is the best method to adopt to obtain pure water in the summer?

DR. PARSONS: We should endeavor to obtain ice from spring water only. This water could be conducted into a reservoir in such a way as to obtain the minimum of surface water or surface drainage.

W. F. EDMUNDSON, M.D.: We are using the natural gas, as you know, in Pittsburgh, and the Materia Medica Club, composed of the

young men, propose taking up the question of the uses and abuses of this gas, and we hope, when our observations are completed, that we shall have something of value to present to you. From personal observation in the matter I should say that there were two objections to natural gas—one is in the danger of the gas itself, and the other is the difficulty of getting people to *use* the gas instead of abusing it. It is a fire which gives very little trouble, and people will keep their houses entirely too hot. You go into a sick room, ask for a thermometer, and, leaving it in the room while you are making your examination, you will find it register from 80° to 95°. This is the great difficulty in its use, to get people to use it in a moderate way. Another objection is that it makes those who use it very sensitive. It makes you feel the severity of the outside atmosphere more than other heating facilities do. It is a dry heat and it dries the secretions of the skin so that you become sensitive to these changes. I know that I felt the cold weather of the last winter more than in any previous one, although I know we have had colder ones. It produces in myself a tired feeling, a languor, and I do not feel fresh or active on coming out of this atmosphere as I did when we were using coal, the latter leaving a more natural feeling. I must say that in rheumatism, according to my observation, if it is not a promoter it is, at least, an aggravator. In several inveterate cases I have had the gas taken out of the room and replaced with coal, and at once the cases began to improve. I have not had a sufficient number of cases to make this observation an established fact, but I have every reason to believe that it is so. We have a great many cases of sore throat, but there are so many causes for this condition that we cannot necessarily attribute it to the use of the gas.

Dr. Parsons: The dry heat in the rooms can be modified by the use of a kettle of water over the grate, thus giving a constant circulation of moist air. I have never had any trouble from the use of heaters. The gas in the locality to which I refer differs from that which they have in use in Pittsburgh, notably in the fact that the former possesses a much stronger oder, and its escape is therefore the more readily detected, enabling consumers to more effectually guard against accidents. The dryness of the atmosphere can be modified by the use of the evaporating kettle placed over the grate.

Dr. Edmundson: I have tried the kettle, but prefer the pan *under* the grate.

Dr. Parsons: What is the best treatment for poisoning from gas?

Dr. Kinne: There are no records of citric acid. I would bathe the body with alcohol, or alcohol and water, and apply electricity, the chief indication being to oxygenate the blood. In the cases of poisoning by carbonic oxide the majority of them have failed to respond to treatment and have proved fatal. There is such a depres-

sion of the vital forces, and the paralysis of the brain has gone to that extent, that it has been found almost impossible to restore the patient when in the state of collapse or stupor. In convulsions the chances are better. In carbonic acid gas poisoning the patients nearly all recover under the application of stimulants and artificial respiration. In the former case physicians have come to almost diagnose the cause from the result. Another thing of interest is the duration of time required to produce fatal poisoning effects, and it has been found under carbonic oxide to be from one-fourth to one-eighth less in time than under carbonic acid gas. Experiments upon animals with this gas have shown that life may be maintained for six hours with sometimes a limit of two hours. Another thing has been demonstrated, and that is, that there lies, between recovery and death, a debatable ground, and the question of interest is, what is the per cent. of gas in the air required to establish this point? We know that in the ordinary air respired $\frac{1}{2000}$ of one per cent. is carbonic oxide gas. Now, one per cent. of this gas is fatal to life, with six hours as the limit of duration. In the air of a room containing small animals this amount of gas inspired with the air proved fatal. With the ventilation freer the time required was longer. Another thing in regard to the use of electricity, which the gas companies like, is, that the use of the electric light outside requires a greater amount of illuminating gas inside; the contrast is so great that we are very apt to turn on the gas full head. The blue flame is not always carbonic oxide. It is non-combustible and non-respirable.

REPORT

OF THE

BUREAU OF ANATOMY, PHYSIOLOGY AND PATHOLOGY.

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THE USE OF THE FROG FOR THE PURPOSES OF HOMŒOPATHY.

By W. Y. Cowl, M.D., New York, N. Y.

Notwithstanding our first and natural idea of the relative importance of objects from their size, we may find it easy to agree with Dubois-Reymond when he says that Schwammerdam, in Holland, discovered the weightiest organ of physiological investigation in the frog; for, using this animal, he first recorded observations on the internal living phenomena, particularly upon muscular contraction and its direct excitation. But even as Vesalius yields to Harvey in fame, so must Schwammerdam to Leuwenhoek and his lenses; for, like Dr. Koch, who generously reproduces to-day the latter's simple and illustrious plate showing all the different classes of bacteria, so must we, who, by virtue of our natural mode of healing, are especially interested in physiology, bear in mind that to this skilful Dutchman we are indebted for the clear and comprehensible description of the ever wonderful phenomenon of the capillary circulation of the blood which he observed in the web of the frog and in the tail of its young; *without* which, in the very modest words of Dr. Alexander Ecker,

author of the *Textbook of the Anatomy* of this animal, we would have been long in coming to an adequate idea of that important physiological process and its peculiar conditions.

It must, however, likewise be remembered, that the immortal discoverer of the circulation of the blood, whose imposing statue stands on the bluff at Folkestone, with its face towards the continent of Europe, that Harvey, amongst the various animals upon which he experimented before he felt that warrant which led him to publish his discovery, included living frogs and snakes, and it must be added that all who have thus once seen the alternating cardiac systole and diastole with their peculiar movement, their relative slowness and distinctness in these animals and their fundamental similarity to those of higher organisms, must acknowledge the wisdom of this renowned Englishman, as well as of those who furnish to-day to students of medicine the same revelation of nature, the same composite view in one moment, which no recounting can replace.

We come now to the contributions of German physiologists, amongst whom let me first quote Dr. Ecker, who says, at the beginning of the above-mentioned book, now a standard for a quarter of a century: "There are to-day no extended reasons required for devoting a special work to the anatomy of the frog; for, enjoying the honor of the physiological house-animal, it is to be found in every physiological laboratory and is daily offered in quantity upon the altar of science. The weightist facts of physiology are to be quickly and easily proved only upon the frog, and at every new question, to get an answer, we grasp this animal, which is always in numbers at command, is particularly adapted by its tenacity of life for research, and, standing further from man in the animal scale than the mammalia, is more open to physiologists endowed with a sensitive temperament."

The chief contribution of Germany, alike to physiology and the frog, and aside from her firm reputation for the proof of theory and the establishment of principle, resides in her remarkable perception of the main thing in the teaching of physiology and the foundation of practical medical knowledge; namely, in the institution and maintenance of laboratories, wherein students and physicians have easy access to the actual subjects of study and proof, under the best guidance, with competent assistance and incomparable armamentaria.

Such *study*, whatever the department, always begins or should be-

gin with the frog; and such *proof* of ideas acquired in practice or research is to be found in attentive observation of the frog far more often than we *a priori* suppose. Witness the demonstration by Johannes Mueller of the idea modestly advanced by Sir Charles Bell, that the posterior roots of the spinal nerves are for sensation and the anterior for motion; for we are dealing, gentlemen, with an animal that, in common with the other vertebrata, is built upon the same fundamental plan, to meet the same conditions of nature, as the human organism itself, and as we are well aware, we are able to effect more by the study and application of similars than is done by contraries and sameness. Thus, then, this practical teaching of physiology to the undergraduate and this help to the practitioner, beclouded with the details of a thousand cases, is the living monument to Mueller, to Dubois-Reymond, to Pflueger, to Brücke, Goltz, Fick, Gad and many others in the line, for these are the men who, with Marey and Bert in France, reverence the frog and give him preeminent place in the institutions under their charge. It is a matter of sincere congratulation that this particular amphibian was left over from the period of the saurians with power to survive in sufficient size in our more drying atmosphere.

The reasons for the prime importance of the frog in the study of the internal organs and their action under different circumstances are various. The chief one is included in the tenacity of life abovementioned; and *is*, namely, that in the frog, as in other cold-blooded animals, during operation and after operation the phenomena of life change little and very slowly from the normal. There may be, for instance, more alteration of the respiration and cardiac action after a few hours' retention in a warm atmosphere in the intact animal, than after prolonged observation and exposure of the organs of the chest or abdomen. The other main preference of the frog for physiology is the absence of fat and the extraordinary economy of connective tissue. Upon cutting, for instance, through the middle of the breastbone, the heart in its sac is laid bare together with the great vessels, whilst by snipping away the sterno-hyoid muscle at its origin on each side, just in front of the pericardium in the frog, the entire vascular and nervous network of the neck and upper chest is laid open to view. Thus, by an unusual but entirely simple and bloodless mode of operation, we are enabled to easily and clearly follow the vessels and nerves of this region through a great part of their course in portions

of which they are found already free from the surrounding tissues, and where not free are easily perceptible through the transparent connective tissue. If the animal be alive the vessels will be full and red, the nerves a glistening white, and none of the latter being cut the operation will be marked by slight and infrequent movements of the animal.

The third and the most important factor in the pre-eminence of the frog for teaching the physiology of the heart and other vessels is, that he pumps air into his lungs instead of drawing it in, and after the chest be opened the respiration and cardiac action go on quite as before. Thus, for the direct study of the latter, whether normal or altered by drugs or other means, he has an immeasurable superiority over warm-blooded and most other cold-blooded animals. Compared with the various movements of the heart and larger vessels, those of the lungs are simple in all animals and may be closely followed in each of them, as well as in man, by means of exact and suitably adapted apparatus; but the physiology of the circulation, of all fields in medicine the most fertile as well as the most difficult to cultivate, is not yet thoroughly ploughed, and this is to be said without reference to the nervous system as well as of the subject altogether.

It was, for instance, but recently perceived that at the beginning of the cardiac systole a period of time must elapse before the blood within the ventricles can open the semi-lunar valves and escape into the aorta and pulmonary artery against the pressure there constantly reigning, and, furthermore, the time that the muscle takes to relax after the blood is forced out of its cavities and the semi-lunar valves become shut by the pressure in the arterial stems is yet unmeasured.

How weighty these factors are, in the first place, for physiology, may be inferred by any practitioner who has felt the hard pulse of the atheromatous aged, or, on the other hand, the soft, dicrotic pulse of continued fever, or who realizes the importance of knowing, despite what cardiac murmurs a patient may or may not have, the amount of functional duty performed by the heart itself; in other words, how sound the patient's heart is. This we can only surely learn, when we are able to measure the periods of time that the heart takes for each various condition in its round of action; whether in health, in experiment or in the various conditions of disease. I need not tell you that the cardiac muscle must struggle longer to drive blood into stiff arteries than into elastic or flaccid ones, nor that, like

a farm-hand worker, it will jump to a lift, and relax for another, quicker when fresh than when tired, nor, furthermore, that, in lifting and fetching as it pleases, it will bring smaller loads in hurried time, when overtired or weak.

Now, up to the present moment, the observation of the pulse by the sphygmograph and the study of the tracings yielded by the apex-beat of the heart, have, with the use of the best instruments by equally renowned observers, led to the most various conclusions as to all but the most simple events in the cardiac cycle; and it is sufficiently evident that we must start again at observation under the simplest and most distinct conditions before the instruments for this purpose can become of use to the profession. It is also evident, upon a perusal of some of the reports of observers of these phenomena in man and the higher animals, that there has been a lack of direct observation of the chief organ itself when laid bare to view. For instance, the most thorough, as well as the most pretentious of the essays on cardiography in man, ascribes to the back-set of blood in great arteries at one point an up-stroke in the curve, and, later on, a down-stroke, without hint of other reason than a change of terms. It is easy to perceive, then, that he who writes or talks about disease, or he who prescribes or teaches about a drug, stands in need of knowing how the heart behaves under the various conditions that we meet *without* particular reference to its recognized and designated conditions of disease.

Watches telling seconds, the clinical thermometer, the stethoscope, the ophthalmoscope, the laryngoscope, the speculum and the extraordinary dependence that we see placed upon them, convince us that we rely neither upon our unaided senses, nor upon our grasp of the system as a whole, as did Hippocrates and Hahnemann and their compeers, whilst the gradual curtailment of the description of the pulse in clinical cases to the number of beats per minute strongly indicates a loss of the *tactus eruditus* on the part of the practitioner. *He must, then,* be supplied with *instruments* whereby to prove the ancient distinctions, until with faith in his tools he may get faith in his fingers. At that moment we believe he will be fit to observe his patient and competent to note the effects of drugs on the healthy organism.

But, to return to our special subject, let us recapitulate some of the preferences of the frog for the purposes of observation, namely,

a sharp view of the entire animal at near distance; a *marked*, sufficiently slow, and very distinct reaction to impressions, especially of drugs; an especial superabundance of cardiac energy and endurance; a consequent tenacity of life; a pulmonary respiration which may be interrupted without damage; a distinctness to view of the internal organs; a ready observation of the capillary and bordering circulation in the web-membrane, the mesentery, the tongue and the retina; the simplicity of experimental procedures, and the easy avoidance of injury to nervous tissue.

In the present era, then, of strife for the certainly sure, for the demonstrable, when the newer experimenters are devoting themselves to apes and other of the higher organisms; and, on the other hand, whilst homœopathists are not following Hahnemann and his pupils in proving drugs upon themselves, we may sacrifice this amphibian, that, but for his legs, would be caught and thrown away, and gain thereby further insight into the fundamental, physiological processes and their alterations, and give our students a chance to get those views of the internal phenomena that never entirely fade from the memory, nor cease to exert their influence upon the natural management of disease.

AMYLOID DEGENERATION.

By D. A. McLachlan, M.D., Ann Arbor, Mich.

This is a peculiar degenerative process, progressive in character, and depositing an albuminoid substance in the connective tissue, primarily in the fibrous texture of the bloodvessels, and especially in the walls of the capillaries. The affected tissues, therefore, increase in bulk, and assume under the microscope a peculiar, uniform, semi-transparent appearance. It may occur in any organ, but is most frequent in the liver, kidneys, intestines, stomach, supra-renal capsules, pancreas, lymphatic glands, thyroid gland, aorta, lungs, ovaries and uterus, in the order named (Hennings).

The chief causes are chronic suppuration and cachexia, as in caries of the bones, ulceration, syphilis, malarial fever, tuberculosis, etc.

If the morbid change is sufficiently great, it may be seen with the naked eye, looking like the fat of fried bacon. Sometimes it is confined to scattered patches like grains of sago, hence the term, "sago-spleen;" at other times, the whole organ is affected uniformly. The morbid process is similar in any situation; the organ grows large and firm to the touch, and upon section presents the peculiar, translucent, waxy appearance.

A section of the liver shows the primary seat of the affection to be in the capillary walls. The endothelium is thickly coated on its outer aspect with a uniform, glassy layer, here and there broken into lumps; this is the amyloid deposit. The liver-cells remain unchanged between the amyloid masses, but are misshapen and atrophied, and often contain fat. Rindfleisch and others believe the amyloid formation to be in the gland-cells; *i.e.*, the epithelial elements. Ziegler, however, who is the latest and most reliable author on this subject, agrees with Wagner, Eberth, and others who believe the connective tissue to be the primary seat. Ziegler found that the cells could always be recognized, but were distorted and atrophied

by pressure from the surrounding deposits. The iodine solution fails to bring them distinctly into view, hence to observe them it is necessary to use one of the other methods of staining. Doubtless it was because of this apparent absence of the gland-cells, that the observers mentioned concluded that they were the seat of the deposit.

In well-marked cases the liver increases to double its natural size; its lower border thickened and blunted, and it has been known to extend from the third rib to the crest of the ilium. It is also increased in weight, is firm and hard when cut through, and a thin section appears to be transparent in a transmitted light. The lobular markings can scarcely be seen, the tissue is brittle and doughy, and pits upon pressure. The capsule is generally smooth, tense, and free from adhesions.

The first changes are seen in the branches of the hepatic artery, and then in the communicating, intralobular capillaries. Since these are in the middle zones of the lobules, these parts are affected very early. The process then spreads to the hepatic veins, and finally involves the interlobular branches of the portal vein. The endothelium of the capillaries remains intact, but the lumen of the vessel is narrowed and often occluded in places. In other places the waxy deposits are separated in the shape of shining clumps, which may be easily mistaken for waxy liver-cells. The cells, however, are compressed, and are so small as to ordinarily escape observation.

The process in the kidney is practically the same. Both are affected, as a rule, but not always to the same extent. The cortical portion is chiefly affected, though the medullary often has a congested look. The loops of vessels within the Malpighian bodies are first affected, the other structures become successively involved, until finally the tubes are distended with casts made up of broken-down epithelium, fatty granules, and fibrinous material, which may be pressed from the tubes in the form of large, hyaline casts. These, however, do not give the characteristic reaction with iodine. The organ is enlarged until the last stage, when it becomes very much atrophied. Amyloid degeneration of the kidneys seldom occurs alone, and is generally accompanied by like changes in the liver, spleen, etc. In a collection of seventy-six cases made by Rosenstein, only five had the kidneys alone affected.

In the lymphatic glands and spleen, the fibrous, trabecular network suffers most, in striated muscles the perimysium internum and

the sarcolemma. Appearances in other parts are similar to those of the liver and kidneys. The results of waxy degeneration are changes in the functional efficience, and the general condition of the affected organ. The structure is profoundly altered in the first place, and the epithelial elements become secondarily diseased. The connective tissue undergoes a permanent change, as the amyloid substance is nearly insoluble, and does not disappear. Such an infiltration must certainly interfere with the function of the diseased organ, the lumen of the vessel is narrowed or closed, thus obstructing the circulation and producing fatty degeneration of the epithelium, while the gland cells are compressed by the increasing volume of the fibrous framework of the organ, so as to almost entirely disappear. In this way the lymphoid cells are apt to perish in the spleen and lymphatics, and the contractile substance vanishes in an affected muscle. Although the degenerative process is usually more or less general, affecting several organs at the same time, it is also, in some rare instances, found in the shape of concretions or localized foci. Such a condition is apt to follow inflammations, either during the process of granulation or after cicatricial tissue is formed. It seems, however, that these localized amyloid formations only occur in tissues which have already undergone morbid change. These little nodular masses or small single foci, consisting almost wholly of amyloid deposit, have been seen in syphilitic scars of the tongue and larynx, in tumors of the larynx and stomach, in diseased lymphatic glands, in old ulcers of the leg, and in degenerating cartilage. Sometimes small homogeneous bodies, evidently formed by the exudation products of inflammation or hemorrhage, are found in various situations, and give the characteristic reaction with iodine. For instance, the tube-casts of the kidneys, formed from the degenerated epithelium and transuded liquid, sometimes show this reaction if they have lain long *in situ*. These little corpora amylacea, as they are called, are found abundantly in morbidly altered brain substance, and in cerebral tumors. They are quite common in the prostate gland, and at the site of very many old hemorrhages.

We know very little of the causes or the nature of amyloid degeneration. We know that it is apt to occur in cachectic conditions of the system, but we do not know what the alterations are that give the morbid process or the deposit its special character. It may even occur without previous disease, and, notwithstanding that it is an

essentially chronic disease, it may become developed and run its course in two or three months, as we find in such cases as follow gunshot wounds and the like. Much speculation has arisen among pathologists as to the cause of the peculiar deposit. Ziegler says: "The amyloid substance does not exist in the blood, but the material out of which it is developed is derived from the blood." He supposes, also, that the peculiar deposit "is due to a combination of an albuminoid body from the blood with certain components from the tissues;" or, that it is "a modification of the albumen of the blood, separating out from the latter in consequence of some abnormal metabolism in the cachectic patient."

Dickinson argues that it is fibrin which has been deprived of alkalies, because the organism loses alkalies in suppuration, which is usually the cause of amyloid change.

Wagner considers the waxy material to be due to a retrogressive metamorphosis of albuminoids, forming an intermediate stage between those bodies and fats.

Virchow likens the amyloid degeneration to the process of chalky deposit in which probably three factors are concerned, viz.: a tissue whose nutrition is somewhat lowered; a substance brought to the tissue by the blood; and an intimate amalgamation between this substance (in the blood) with one preëxisting in the tissue.

Though the amyloid substance is nitrogenous and albuminoid, it is distinguished from all other albuminoids by its insolubility in gastric juice or in an acid solution of pepsin, and by the power it possesses of withstanding putrid decomposition for a long time. It is only slightly acted upon by acids or alkalies, and is not at all affected by alcohol or chromic acid.

It would not be proper to take leave of the subject without noticing some of the familiar methods of determining the existence of the amyloid deposit. We have already mentioned its peculiar waxy or translucent look, the increase in size, and homogeneous appearance on microscopical examination. If microscopical sections of tissue are placed in a weak solution of iodine, the affected parts assume a reddish-brown or mahogany color; and, if then put into a weak solution of sulphuric or hydrochloric acid, the degenerated parts will turn to violet-blue or pure blue. Various aniline colors also afford valuable tests. Methyl-violet (1 per cent.) stains the waxy parts

bright red, and the non-waxy parts take on a blue color. Saffronin stains the waxy parts orange-yellow, the non-waxy parts rose-red.

In examining fresh specimens in a cursory way, it is necessary to wash the surface free from blood, as the red color of the blood may blend with the yellow of the iodine so as to simulate the characteristic mahogany color.

Lastly, I desire briefly to call your attention to a case which recently occurred in my own practice, and which suggested the subject of this paper.

The patient was a woman, aged 32, with the following history: Her father died of gastric cancer at about 35 years of age, and her mother of bilious fever at 43 years of age. She has one brother and two sisters, all in good health. She has been married 14 years, and had seven children, five of which are living and healthy; the others died when very young.

The patient had always enjoyed excellent health until two years ago, when she had a miscarriage at about the second month, brought on apparently by incessant vomiting. Only a small portion of the membranes came away at the time, and about six weeks after, her physician gave her medicine to remove them, which brought away a number of shreds of a very offensive odor. This state of things continued for some time after. About this time also her stomach and bowels began to enlarge. She had always been troubled with constipation, but during her illness has been much worse, so that the bowels only moved after using a cathartic or enema. The stools had been in the shape of hard, round balls of a dark-brown color, and accompanied by great tenesmus.

About two years ago she went to a sanatarium in Buffalo, where she had treatment for about five months with slight improvement. While there she one day experienced a choking sensation, and, in the effort to get a drink, something "broke internally," and about a teacupful of pus discharged from the urethra. After this, "the water was very bad," was greater in quantity, yellow color, deposited a light sediment, and was sometimes bloody. She was troubled with palpitation of the heart then, also.

In the early part of her illness, the fulness of the stomach and bloating of the abdomen were attended with nausea and vomiting, dull, heavy, burning pain, and soreness and tenderness to touch. At that time also she had much chilliness and fever. These attacks

were at first irregular, two or three months often intervening, but more recently they have occurred regularly about twice a week, and the bloating of the abdomen became permanent. At the time I saw her, about six o'clock every evening attacks of colicky pain came on, accompanied by sharp pain, sour eructations, etc. Her appetite was good, she craved sour things, and could not eat sweets. She seldom had any headache, but was very weak and profoundly depressed. She was very thirsty and drank a great deal of cool water. The urine was profuse, passed frequently and scalded while passing; it was pale or milky in color, and deposited a sediment, which looked like pus. There was and had been a great deal of pressure and pain in the loins and hips.

The patient presented an extremely cachectic and bronzed appearance. The sclerotic was very white, and extensive pigmentations had taken place in various portions of the skin, especially on the face, dorsum of the hands and feet, and the nipples. An analysis of the twenty-four hours' urine gave the following results: Amount, 2450 c.c.; specific gravity, 1009; reaction, acid; abnormalities, pus and albumen in large quantity, urates, casts, and epithelium. The epithelial cells were of the irregular, three-cornered, spindle-shaped, elongated, tailed variety, and derived evidently from the pelvis and infundibula of the kidney. The casts noticed were hyaline casts and very difficult to find.

Physical examination revealed enlarged abdomen partly due to ascites, which was considerable, and partly to the greatly enlarged liver, which extended, lying down, from the third interspace to very near the crest of the ilium; the area of dulness extended about five inches over the left lobe. The liver was very smooth, firm and hard to the touch, and the anterior border was easily outlined upon palpation over its whole extent. The spleen was found to be enlarged also to some extent, but not proportionately with the liver. The remaining portions of the abdomen were decidedly tympanitic, except over the gravitated ascitic fluid. The kidney exhibited signs of enlargement posteriorly, but this, as may be supposed, was very difficult to determine definitely.

The thoracic organs were apparently perfectly normal, except that the diaphragm was crowded high up, and the respiratory sounds rendered slightly bronchial in consequence. The heart showed no signs of disease, the pulse being only slightly accelerated (90 in the

recumbent position), owing doubtless to the pressure from the adjacent organ. The heart's action became rapid on making any exertion, but the extreme degree of prostration accounted for that.

There could be little hesitancy in diagnosing amyloid degeneration in this case, though the appearance of the patient would at first sight lead one to decide upon Addison's disease. In fact there would seem to be an involvement of the supra-renal capsules, as well as the kidneys, liver and spleen; indeed it was impossible to say just how many tissues were involved in the degenerative process. The leukæmia together with the physical signs left no doubt as to the implication of the spleen, and the physical signs clearly showed the extensive affection of the liver also. That the kidneys were the subjects of the lardaceous form of Bright's disease, was evident from the analysis of the urine, and all these, together with the characteristic history of septic absorption, chronic pyelitis, extreme cachexia, profound prostration, etc., form a complexus of symptoms that will enable as positive a diagnosis to be made as is possible during life.

Now, what is the moral in this case? Do not allow suppuration or any septic condition to continue a moment longer than can be helped. Make drainage for purulent accumulations at the earliest possible moment, and in short, take active measures to cut short these etiological factors which are so liable to result in amyloid degeneration, and thus, sooner or later, lead to a fatal issue.

TEMPERATURE IN MALARIAL DISEASES.

By W. John Harris, M.D., St. Louis, Mo.

Last year, at the request of Dr. John C. Morgan, of Philadelphia, I made a report to the American Institute of Homœopathy, on temperature in malarial diseases.

The cases reported at that time were very characteristic in some respects—notably, the rise or fall of temperature being characterized by a wave motion, very much like the ebb and flow of the tide, and not by a steady rise from the lowest to the highest diurnal change or *vice versa.* Also that a sudden fall from a high temperature to a point below the normal (103¼° to 96¼°), while producing a state of collapse, may not be fatal—as the patient recovered.

Since last year I have from time to time made further observations, and have found that where this wave motion is present in the temperature record, the patients have in each case recovered, but that when the high temperature is almost stationary—that is, with scarcely any variation—the danger to life is much greater, and the disease will most probably prove fatal. The record is presented herewith of a case of typho-malarial fever that terminated fatally under this condition; the patient had, however, been sick for two weeks before I saw her.

In most cases I have found the temperature to be lowest at from 2 to 4 A.M., at which time it will generally be found that patients suffering from long illnesses or wasting diseases are in a more exhausted condition than any other time out of the twenty-four hours. In my case reported last year where the temperature fell down to 95¼° the fall began on two successive days at 3 A.M. and continued to drop until 9 A.M. During the two days following, the temperature

gradually rose, but at the same hour (3 A.M.) each morning, a slight fall occurred, and for three days was subnormal. Dr. Morgan has kindly sent me some temperature notes of different cases, but as they are not of malarial diseases I regret I cannot include them in this report.

The case of John W., reported now, is very similar to one noted last year. The temperature remained high until the tenth day—but did not reach the normal standard until the nineteenth day. *Recovery.*

The other case is that of a young girl, aged 11½ years, who had been sick with typho-malarial fever for over two weeks when I saw her. The temperature remained nearly stationary at 106° during the entire time of my attendance.

No medicine seemed to make any impression on the temperature, and the patient literally burned up. This case is presented for comparison with one reported last year in which the temperature was just as high, but there was a variation of from one to two degrees every day—giving the system a certain amount of rest.

Typho-malarial Fever.

Case I.—Miss L. W——t. April 12, 1888.

Day of Disease.	Temperature.					
	8 A.M.	12 NOON.	4 P.M.	8 P.M.	12 NIGHT.	4 A.M.
1st.	105½	106	106	106	105½	106
2d.	106	106	105½	106	106	106
3d.	106	105½	106	106	106	106½
4th.	106	106	105½	106	106	106
5th.	106	105½	106	106	106	106
6th.	106	106	106½	106	106	106½
7th.	106	105½	106	106	106	106½
8th.	106	106	106½	106	106	106
9th.	105½	106	105	105	106	106½
10th.	106	106½	106	106½	106	106

Patient died (in convulsions) on tenth day after my visit. Temperature 106½°.

Bilious Remittent Fever.

Case II.—John W——s, æt. 19. May 14, 1888.

Day of Disease.	Temperature.					
	8 A.M.	12 NOON.	4 P.M.	8 P.M.	12 NIGHT.	4 A.M.
1st.	104	104½	106	105	106	105½
2d.	105	104¾	105	104½	105	106
3d.	105½	106	105	105½	105	105½
4th.	105	104½	105	105½	104	104¾
5th.	106	105	105	104½	104½	105
6th.	105½	105	105	104½	104½	105
7th.	105½	104¾	105	104½	105	105
8th.	106	105½	105	104½	105	105
9th.	104	104½	105	104½	105	104½
10th.	104	104½	105	104½	104½	104½
11th.	103¾	104½	104¾	104½	104½	104½
12th.	103½	104	103¾	103	103	103½
13th.	102¾	103	102¾	102	102	101½
14th.	101	101½	101	102	101	101
15th.	100	100½	101	100½	101	101

Recovery. Temperature normal on nineteenth day.

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OF THE

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HOMŒOPATHIC MEDICAL SOCIETIES

NAME.	State.	When Organized.	When Incorporated.	Meetings.	1888 Annual Meeting.	PRESIDENT.
NATIONAL						
1. Amer. Institute of Homœopathy.		1844	Not.	Ann.	Niagara, N.Y., June.	A. C. Cowperthwaite, M.D., Iowa City, Iowa.
2. International Hahnemannian Association.		1880	Not.	Ann.	Niagara, N. Y., June.	Wm. P. Wesselhoeft, M.D., 176 Common'lth Ave., Boston, Mass.
3. Amer. Obstetrical Society.		1885	1885	Quar.	New York City.	Geo. W. Winterburn, M.D., 94 Park Ave., New York.
SECTIONAL OR INTER-STATE						
1. Western Academy of Homœopathy.		1874	Not.	Ann.	Omaha, Neb., May.	T. S. Hoyne, M.D., 1833 Indiana Ave., Chicago, Ill.
2. Southern Hom. Med. Association.		1885	Not.	Ann.	Nashville, Tenn.	Geo. M. Ockford, M.D., Lexington, Ky.
STATE						
1. California State Hom. Med. Society.	Cal.	1877	1887	Ann.	San Francisco, 2d Wed., May.	S. Powell Burdick, M.D., Oakland.
2. Hom. Med. Society, State of Colorado.	Col.	1881	Not.	Ann.	Denver, May.	W. L. Brett, M.D., Denver.
3. Connecticut Hom. Med. Society.	Conn.	1851	1864	Semi-ann.	Hartford, 3d Tues., May.	E. E. Case, M.D., 253 Main St., Hartford.
4. Dakota Hom. Med. Association.	Dak.	1886	1886	Ann.	Watertown, 1st Tuesday, June.	
5. Hom. Med. Society of Delaware and the Peninsula.	Del.	1884	Not.	Ann	Wilmington, Dec.	Peter Cooper, M.D., Wilmington.
6. Illinois Hom. Med. Association.	Ill.	1855	1855	Ann.	Chicago.	Chas. Gatchell, M.D., 48 Madison St., Chicago.
7. Indiana Institute of Homœopathy.	Ind.	1867	1882	Ann.	Indianapolis, 4th Wed., May.	G. W. Bowen, M.D., Ft. Wayne.

IN THE UNITED STATES.

Secretary.	Number of Members.	Admitted Last Year.	Died Last Year.	Annual Dues.	Publications last Year.	Delegates.
			SOCIETIES.			
Pemberton Dudley, M.D., 15th and Master Sts., Phila., Pa.	935	69	19	$5 00	Trans.	
E. A. Ballard, M.D., 97 37th St., Chicago, Ill.	133	23	4	3 00	Trans.	
	152	None.	None.	1 00	None.	
			SOCIETIES.			
J. C. Burger, M.D., Boonville, Mo.						
C. R. Mayer, M.D., New Orleans, La.	71	3	None.	3 00	None.	
			SOCIETIES.			
A. C. Peterson, M.D., 319 Geary St., San Francisco.	68	7	None.	2 00	Papers in Cal. Homœopath.	Wm. Boericke, M.D., Homœopath.
W. A. Burr, M.D., 1854 Welton st., Denver	25	None.	None.	2 00	None.	C. N. Hart, M.D.
E. B. Hooker, M.D., Hartford.	73	7	None.	2 00	Trans. and various papers in N.E. Medical Gazette.	E. B. Hooker, M.D., C. B. Adams, M.D., C. S. Hoag, M.D., C. H. Colgrove, M.D., Sophia Penfield, M.D.
E. W. Murray, M.D., Redfield.	12	None.	None.	2 00	None.	
Irvine M. Flinn, M.D., Newport.	25	3	None.	2 00	None.	R. Kyle Colby, M.D., J. Paul Lukens, M.D.
A. B. Späch, M.D., 6310 Wentworth Ave., Chicago.	300	20	None.	None.	Trans.	
E. B. Grosvenor, M.D., Richmond.						

STATE HOMŒOPATHIC MEDICAL SOCIETIES

Name.	State.	When organized.	When Incorporated.	Meetings.	1888 Annual Meeting.	President.
8. Hahnemann Med. Associat'n of Iowa.	Iowa.	1870	1877	Ann.	Iowa City, June.	B. Barton, M.D., Waterloo.
9. Hom. Med. Society of Kansas.	Kan.	1869	1869	Ann.	Wichita, 1st Wed., May.	P. Diederich, M.D., Kansas City.
10. Kentucky State Hom. Med. Society	Ky.	1886	1888	Ann.	3d Wed., May.	C. P. Meredith, M.D., Eminence.
11. Hahnemann Med. Association of Louisiana.	La.	1880				Has disbanded.
12. Maine Hom. Med. Society.	Me.	1867	1867	Ann.	Augusta, 1st Tues., June.	Charles A. Cochran, M.D., Winthrop.
13. Maryland State Hom. Med. Society	Md.	1872	1872	Ann.	Baltimore.	Jos. Lloyd Martin, M.D. 24 Mt. Vernon St., Baltimore.
14. Massachusetts Hom. Med. Society	Mass.	1840	1856	Semi-Ann.	Boston, 2d Wed., April.	Joseph W. Hayward, M.D., Taunton.
15. Hom. Society of State of Michigan.	Mich.	1869	1869	Ann.	Lansing, 3d Tues., May.	Leonidas M. Jones, M.D., Brooklyn.
16. Minnesota State Hom. Institute.	Minn	1867	1867	Ann.	Minneapolis, 2d Tues., May.	E. R. Perkins, M.D., Excelsior.
17. Missouri Institute of Homœopathy.	Mo.	1876	Not.	Ann.	Kansas City April.	W. G. Hall, M.D., St. Joseph.
18. Nebraska State Hom. Society.	Neb.	1873	1883	Ann.	Omaha, 4th Wed., May.	B. F. Bailey, M.D., Lincoln.
19. Hom. Med. Society State of New Hampshire.	N. H.	1853	1853	Quar.	Concord, 2d Wed., June.	C. W. Adams, M.D., Franklin Falls.

IN THE UNITED STATES—CONTINUED.

SECRETARY.	Number of Members.	Admitted Last Year.	Died Last Year.	Annual Dues.	Publications last Year.	DELEGATES.
George Royal, M.D., Des Moines.	120	13	None.	$2 00	Trans.	A. C. Cowperthwaite, M.D., R. F. Baker, M.D., J. A. Carson, M.D., George Royal, M.D.
J. F. Elliott, M.D., Kansas City.	108	18	None.	1 00	History and Proceed'ngs of Society.	H. W. Roby, M.D.
A. C. Jones, M.D., Carrollton.	35	4	None.	2 00	Sundry papers.	J. T. Vansant, M.D.
J. C. Gannett, M.D., Yarmouthville.	52	6	None.	1 00	Trans.	A. F. Pyser, M.D., W. B. Perkins, M.D., H. C. Jefferds, M.D., W. F. Shepard, M.D.
Irving Miller, M.D., 1207 E. Monument St., Baltimore.	27	4	1	3 00	None.	
Frank C. Richardson, M.D., East Boston.	225	8	2	5 00	Trans.	I. T. Talbot, M.D., Walter Wesselhoeft, M.D., J. P. Sutherland, M.D., H. C. Hemenway, M.D., Conrad Wesselhoeft, M.D., C. H. Nichols, M.D., E. U. Jones, M.D., Wm. H. Longee, M.D., H. L. Chase, M.D.
W. M. Bailey, M.D., 29 Miami St., Detroit.	300	19	None.	2 00	None.	R. C. Olin, M.D.
Genevieve Tucker, M.D., Northfield.	105	8	1	2 00	None.	Geo. F. Roberts, M.D., Wm. E. Leonard, M.D., Alex. Donald, M.D.
Moses T. Runnels, M.D., 8 E. 9th St., Kansas City.	124	34	None.	2 00	Various papers.	
D. E. Foristall, M.D., York.	75	8	None.	1 00	None.	Amelia Burroughs, M.D., O. S. Wood, M.D., Geo. W. Parsell, M.D., W. H. Hanchett, M.D.
B. D. Peaslee, M.D., Concord.	50	4	1	1 00	None.	

STATE HOMŒOPATHIC MEDICAL SOCIETIES

NAME.	State.	When Organized	When Incorporated.	Meetings.	1888 Annual Meeting.	PRESIDENT.
20. New Jersey State Hom. Med. Soc'y.	N. J.	1854	1870	Semi-Ann.	Newark, 1st Tues., May.	Jacob G. Street, M.D., Bridgeton.
21. Hom. Med. Society State of New York.	N. Y.	1850	1862	Semi-Ann.	Albany, 2d Tues., Feb.	Wm. Tod Helmuth, M.D., 299 Madison Av. New York.
22. Hom. Med. Society State of Ohio.	Ohio.	1864	1878	Ann.	Delaware, 2d Wed., May.	Chas. E. Walton, M.D., Hamilton.
23. Hom. Med. Society State of Oregon.	Oreg.	1876	1876	Ann.	Portland, 2d Tues., May.	George Wigg, M.D., Portland.
24. Hom. Med. Society State of Penna.	Pa.	1866	Not.	Ann.	Phila., Sept.	Hugh Pitcairn, M.D., Harrisburg.
25. Rhode Island State Hom. Med. Soc'ty.	R. I.	1850	1850	Quar.	Providence, 2d Fri. Jan.	Charles Hayes, M.D., 3 Toby St., Providence.
26. Hom. Med. Soc'ty, State of Tennessee.	Tenn.	1875	Not.	Ann.	Nashville, 2d Wed. Oct.	E. H. Price, M.D., Chattanooga.
27. Texas Hom. Med. Association.	Tex.	1884	Not.	Ann.	Ft. Worth, May.	F. Hines, M.D., Corsicana.
28. Vermont Hom. Medical Society.	Vt.	1854	1858	Semi-Ann.	Montpelier, Last Wed., May.	James Haylett, M.D., Morstown.
29. Hahnemann Med. Society of the Old Dominion.	Va.	1880	1880	Ann.	Richmond, Oct.	Jos. V. Hobson, M.D., 5th and Grace Sts., Richmond.
30. Hom. Med. Soc'y, State of Wisconsin.	Wis.	1865	1865	Ann.	Milwaukee, 3d Wed., May.	E. W. Bebee, M.D., Milwaukee.

IN THE UNITED STATES—CONTINUED.

SECRETARY.	Number of Members.	Admitted last Year.	Died last Year.	Annual Dues.	Publications last Year.	DELEGATES.
B. H. B. Sleght, M.D., 29 Chestnut St., Newark.	150	15	1	$1 00	Transactions and papers in journals.	C. W. Butler, M.D.
Herbert M. Dayfort, M.D., 41 Sophia St., Rochester.	278	38	10	3 00	Transactions.	S. F. Wilcox, M.D., Sam'l Talmage, M.D., S. H. Talcott, M.D., S. W. Skinner, M.D., T. D. Spenser, M.D., F. F. Laird, M.D., W. B. Kenyon, M.D.
Frank Kraft, M.D., Sylvania.	228	12	None.	2 00	Transactions.	M. P. Hunt, M.D., Chas. E. Walton, M.D.
S. Lewis King, M.D., 133½ First St., Portland.	21	None.	None.	2 00	None.	
Clarence Bartlett, M.D., 1506 Girard Av. Philadelphia.	266	20	3	3 00	Transactions.	A. R. Thomas, M.D., Jos. E. Jones, M.D., L. H. Willard, M.D., Clarence Bartlett, M.D.
W. H. Stone, M.D., 133 Ormes St., Providence.	49	3	None.	5 00	None.	Chas. Hayes, M.D., Chas. A. Barnard, M.D. Geo. D. Wilcox, M.D., H. A. Whitmarsh, M.D.
Wm. C. Dake, M.D., Nashville.	28	None.	None.	1 00	None.	J. P. Dake, M.D.
G. G. Clifford, M.D., San Antonio.	35	8	None.	2 00	None.	Mortimer Slocum, M.D.
F. E. Steele, M.D., Gaysville.	37	1	None.	1 00	None.	E. L. Wyman, M.D.
Geo. A. Taber, M.D., 103 East Main St., Richmond.	14	None.	None.	1 00	None.	Jos. V. Hobson, M.D.
F. D. Brooks, M.D., Milwaukee.	119	4	2	1 50	Transactions.	Lewis Sherman, M D.

LOCAL HOMŒOPATHIC MEDICAL SOCIETIES.

Name.	State.	When Organized.	When Incorporated.	Meetings.	1888 Annual Meeting.	President.
1. Alameda Co. Hom. Med. Society.	Cal.	1877	Not.	Mth.	Oakland, 2d Tues., Oct.	E. W. Bradley, M.D., East Oakland.
2. Washington Hom. Med. Society.	D. C.	1870	1870	Mth.	Washington.	C. B. Gilbert, M.D., 1001 H St.
3. Women's Hom. Medical Society of Chicago.	Ill.	1878	Not.	Mth.	Chicago, 2d Mon., Jan.	Lucy J. Waite, M.D., 5306 Jefferson Ave., Hyde Park.
4. Rock River Institute of Hom.	Ill.	1878	1880	Quar.	Dixon.	G. L. Chapman, M.D.
5. Chicago Academy of Hom. Physicians and Surgeons.	Ill.	1869	Not.	Mth.	Chicago.	L. C. Grosvenor, M.D., 185 Lincoln Ave., Chicago.
6. Clinical Society of Hahnemann Hospital of Chicago.	Ill.	1876	Not.	Mth.	Chicago, 1st Sat., April.	G. F. Shears, M.D., 3130 Madison Ave., Chicago.
7. Cedar Valley Hom. Med. Ass'n.	Iowa.	1878	Not.	Ann.	Waterloo.	W. H. Pettit, M.D., Cedar Falls.
8. Central Hom. Ass'n of Iowa.	Iowa.	1879	Not.	Quar.	Cedar Rapids.	C. H. Cogswell, M.D., Cedar Rapids.
9. Northeastern Iowa Hom. Med. Society.	Iowa.	1882	Not.	Semi-ann.	West Union.	E. Cartwright, M.D., Decorah.
10. Topeka Hom. Med. Society.	Kan.	1881	1882	Mth.	Topeka, 1st Mon., Nov.	H. F. Kemp, M.D., Topeka.
11. Alumni Assoc'tion of Boston University School of Med.	Mass.	1878	Not.	Ann.	Boston, 1st Tues., June.	Almena J. Baker, M.D. 168 West Newton St., Boston.
12. Boston Hom. Medical Society.	Mass.	1873	Not.	Mth.	Boston.	F. C. Richardson, M.D. East Boston.
13. Dispensary Association of Boston University School of Medicine.	Mass.	1879	Not.	Ann.	Boston, 1st Thurs., Dec.	Herbert C. Clapp, M.D. 11 Columbus Square, Boston.
14. Essex Co. Hom. Medical Society	Mass.	1872	Not.	Mth.	Salem, 4th Wed., Dec.	Chas. Lloyd, M.D., Lynn.
15. Mass. Surgical and Gynæcological Soc	Mass.	1876	Not.	Semi-ann.	Boston, 2d Wed., Dec.	Alonzo Boothby, M.D., Boston.
16. Hom. Med. Soc. Western Mass.	Mass.	1877	Not.	Quar.	Springfield, 2d Wed., March.	Geo. H. Wilkins, M.D., Palmer.
17. Worcester Co. Hom. Med. Soc.	Mass.	1866	Not.	Quar.	Worcester, 2d Wed., Nov.	E. A. Murdock, M.D., Spencer.
18. Alumni Ass'n of Univ. of Michigan.	Mich.	1878	1878	Ann.	Ann Arbor.	R. C. Olin, M.D., Detroit.
19. College of Physicians and Surgeons of Michigan.	Mich.	1878	1878	Wk'y	Detroit.	E. P. Gaylord, M.D.

IN THE UNITED STATES.

Secretary.	Number of Members.	Admitted last Year.	Died last Year.	Annual Dues.	Publications last Year.	Delegates.
S. F. Rodolph, M.D., Oakland.	17	1	None.	$1 00	Sundry papers.	
D. H. Riggs, M.D., 1012 Massac'etts Ave.	35	4	None.	None.	None.	Chas. A. Bacon, M.D.
Isidore L. Green, M.D. 315 Lincoln Ave., Chicago.	24	6	None.	1 00	Sundry papers in Medical Era.	Julia Holmes Smith, M.D.
O. B. Blackman, M.D. Dixon, Ill.	27	2	1	1 00	Sundry papers in journals.	
R. W. Conant, M.D., 909 Harrison St., Chicago.	50	None.	None.	1 00	Non e.	L. C. Grosvenor, M.D.
J. P. Cobb, M.D., 3638 Indiana Ave., Chicago.	175	20	None.	1 00	"Clinique."	E. S. Bailey, M.D.
W. H. Banton, M.D., Cedar Falls.	30	None.	None.	1 00	Non .	
W. A. Hubbard, M.D. Marion.	25	2	None.	1 00	None.	A. C. Cowperthwaite, M.D.
M. Y. Baker, M.D., Fayette.	15	None.	None.	1 00	None.	M. Y. Baker, M.D.
L. A. Ryder, M.D., North Topeka.	18	None.	None.	None.	None.	
Walter H. White, M.D. 429 Columbus Ave., Boston.	392	28	1	None.	None.	Almena J. Baker, M.D.
W. J. Winn, M.D., Cambridge.	180	15	3	1 00	Sundry papers.	
J. S. Shaw, M.D., 577 Tremont St., Boston.	30	None.	None.	None.	None.	A. L. Kennedy, M.D.
Frank A. Gardner, M.D., Salem.	30	1	None.	1 00	None.	David Foss, M.D.
Lester A. Phillips, M.D. 165 Boylston St., Bos.	116	4	None.	1 00	Sundry papers and proceedings.	Alonzo Boothby, M.D.
Geo. Winson Bates, M.D., Springfield.	44	4	2	1 00	None.	
Lamson Allan, M.D., Southbridge.	42	3	None.	2 00	None.	E. L. Mellus, M.D.
Emma E. Bowen, M.D. Ann Arbor.		No	Repo	rt.		
R. C. Rudy, M.D.	30	5	None.	4 00	Trans.	R. C. Olin, M.D., W. A. Polglasi, M.D.

LOCAL HOMŒOPATHIC MEDICAL SOCIETIES

Name.	State.	When Organized.	When Incorporated.	Meetings.	1888 Annual Meeting.	President.
20. Central District Hom. Med. Soc.	Mich.	1886	Not.	Quar.	Lansing, 4th Wed., Sept.	D. M. Nottingham, M.D., Lansing.
21. Hahnemann Med. Soc. of Barry and Eaton Cos.	Mich.	1879	Not.	Quar.	Different Places, 1st Wed., June.	C. S. Burton, M.D., Hastings.
22. Hom. Med. Soc. of South-western Michigan.	Mich.	1886	1886	Quar.	Kalamazoo, 1st Tues., Sept	Whitman E. Clark, M.D., Three Rivers.
23. Huron District Hom. Med. Soc.	Mich.	1886	Not.	Semi-Ann.	Port Huron, 1st Tues., Feb.	G. C. Vincent, M.D., Deckerville, Mich.
24. Saginaw Valley Hom. Association.	Mich.	1886	Not.	Quar.	East Saginaw, last Wed., Dec.	N. R. Gilbert, M.D., Bay City.
25. Thayer Hom. Med. Soc. of Southern Michigan.	Mich.	1886	Not.	Quar.	Jackson, 3d Tues., Jan.	Leonidas M. Jones, Brooklyn.
26. Western Michigan Institute of Hom.	Mich.	1886	Not.	Quar.		L. T. Marvin, M.D., Muskegon.
27. Academy of Hom. Medicine of Minneapolis and St. Paul.	Minn	1888	Not.	Mth.	Minneapolis, 1st Tues. June.	Chas. H. Glidden, M.D. St. Paul.
28. Hom. Med. Soc. of St. Paul.	Minn	1872	Not.	Mth.	St. Paul, 1st Tues., April	E. F. Schmidt, M.D., 274 East Seventh St., St. Paul.
29. Hahnemannian Med. Society of Hennepin Co.	Minn	1872	Not.	Mth.	Minneapolis, 1st Tues. Sept.	Wm. H. Leonard, M.D. 409 Nicollet Ave., Minneapolis.
30. St. Louis Soc. of Hom. Physicians and Surgeons.	Mo.					
31. Essex Co. Hom. Med. Society.	N. J.	1885	Not.	Mth.	Newark.	G. W. Richards, M.D., Orange.
32. West New Jersey Hom. Med. Soc.	N. J.	1869	Not.	Quar.	Camden, May.	Joseph Shreve, M.D., Burlington.
33. Alumni Ass'n of New York Hom. Med. College.	N. Y.	1883	Not.	Ann.	N. Y. City.	St. Clair Smith, M.D., 8 West 38th St., New York.
34. Alumni Ass'n of New York Med. College and Hospital for Women.	N. Y.	1875	1875	Ann.	N. Y. City.	Louise Gerrard, M.D., 149 West 41st St., New York.
35. Albany Co. Hom. Med. Society.	N. Y.	1861	1861	Quar.	Albany, 2d Tues., Jan.	Chas. E. Jones, M.D., 140 State St., Albany.

IN THE UNITED STATES—CONTINUED.

SECRETARY.	Number of Members.	Admitted last Year.	Died last Year.	Annual Dues.	Publications last Year.	DELEGATES.
C. M. Watson, M.D., Lansing.	17	7	None.	$1 00	Sundry papers in journals.	C. M. Watson, M.D.
Mrs. Dr. Beebe.	19	1	None.	1 00	None.	
Edward A. Balyeat, M.D., Kalamazoo.	20	5	None.	None.	None.	
O. M. Stephenson, M.D. Fort Gratiot, Mich.	23	None.	None.	None.	None.	
R. N. Wheeler, M.D., St. Louis, Mich.	30	10	None.	1 00	None.	N. Johnson, M.D.
J. T. Brown, M.D, Jackson.	28	8	None.	50	None.	Leonidas M. Jones.
A. B. Conant, M.D., Ionia.	15	None.	None.	50	None.	
Mary E. Emeny, M.D., St. Paul.	40	40	None.	1 00	None.	
Jennie Fuller, M.D., Ingersoll Block, St. Paul.		No	Repo	rt.		
Asa S. Wilson, M.D., Syndicate Block, Minneapolis.	45	None.	1	1 00	None.	
		No	Repo	rt.		
B. H. B. Sleght, M.D., 29 Chestnut St., Newark.	16	None.	None.	1 00	None.	
Geo. D. Woodward, M.D., Camden.	52	9	2	1 00	None.	D. R. Gardiner, M.D., E. M. Howard, M.D.
S. H. Vehslage, M.D., 313 East 18th St., New York.	600	48	40	1 00	None.	
Louise Lannin, M.D., 243 West 46th St., New York.	132	7	1	1 00	None.	
C. W. Schwartz, M.D., Clinton Place, Albany.	20	None.	2	2 00	None.	Geo. E. Gorham, M.D.

LOCAL HOMŒOPATHIC MEDICAL SOCIETIES

Name.	State.	When Organized.	When Incorporated.	Meetings.	1888 Annual Meeting.	President.
36. Alleghany Co. Hom. Medical Society.	N. Y.	1883	Not.	Quar.	Belmont, 2d Tues., Jan.	I. P. Truman, M.D., Alfred Center
37. Brooklyn Hom. Hospital District Staff Ass'n.	N. Y.	1852	1852	Bi-Mth.	Brooklyn.	B. E. Mead, M.D., 316 State St., Brooklyn.
38. Broome Co. Hom. Medical Society.	N. Y.	1882	1882		Binghamton, 1st Wed. June.	S. S. Simmons, M.D., Susquehanna, Pa.
39. Cayuga Co. Hom. Med. Society.	N. Y.	1859	1883		Auburn, 2d Mon., June.	M. M. Frye, M.D., Auburn.
40. Chautauqua and Cattaraugus Counties Hom. Medical Society.	N. Y.	1861	1861	Ann.		A. B. Rice, M.D., Panama.
41. Chemung Co. Hom. Med. Soc.	N. Y.	1861	1861	Semi-ann.	Elmira, Dec.	L. D. Parkherst, M.D., Elmira.
42. Chenango Co. Hom. Medical Society.	N. Y.	1871	1872	Semi-ann.	Norwich, 3d Mon., Jan.	R. E. Millie, M.D., Oxford.
43. Central New York Hom. Medical Society.	N. Y.	1850	Not.	Semi-ann.	Syracuse, 3d Thurs., Sept.	T. Dwight Stow, M.D., Mexico.
44. Columbia and Greene Counties Hom. Med. Soc.	N. Y.	1861	1861	Semi-ann.	Hudson, Oct.	Wright H. Barnes, M.D, Chatham, Columbia Co.
45. Dutchess Co. Hom. Medical Society.	N. Y.	1865	1865	Semi-ann.	Po'keepsie, 1st Tues., Oct.	John C. Otis, M.D., Poughkeepsie.
46. Erie County Hom. Medical Society.	N. Y.	1854	1854	Ann.	Buffalo.	Louis A. Bull, M.D., 160 Franklin St., Buffalo.
47. Hom. Med. Society County of Kings.	N. Y.	1857	1857	Mth.	Brooklyn, 2d Tues, Jan.	J. L. Moffat, M.D., 17 Schermerhorn St.
48. Hom. Medical Society, County of New York.	N. Y.	1857	1857	Mth.	New York, 2d Thurs., Dec.	J. M. Schley, M.D., 1 East 42d St.
49. Hom. Med. Society of Western New York.	N. Y.	1885	Not.	Quar.	Buffalo, 2d Tues., April	W. B. Gifford, M.D., Attica.
50. Livingston County Hom. Medical Society.	N. Y.	1857	Not.	Ann.	Conesus Lake, 2d Tues., June.	B. P. Andrews, M.D, Dansville.
51. Madison County Hom. Medical Society.	N. Y.	1865	Not.	Semi-ann.	Oneida, 4th Tues., June.	G. B. Palmer, M.D., East Hamilton.

IN THE UNITED STATES—CONTINUED.

SECRETARY.	Number of Members.	Admitted Last Year.	Died Last Year.	Annual Dues.	Publications last Year.	DELEGATES.
B. F. Williamson, M.D. Friendship.	11	None.	1	$ 50	None.	I. P. Truman.
Geo. H. Palmer, M.D., 90 Hancock St., Brooklyn.		No	Repo	rt.		
L. H. Martin, M.D., Binghamton.	25	6	2	1 00	Code of Ethics and Fee Bill.	
Wm. Gwynn, M.D., Throop.	20	1	1	1 00	None.	
A. Wilson Dods, M.D., Fredonia.	18	None.	None.	None.	None.	
O. Groom, M.D., Horseheads.	10	None.	1	1 00	None.	O. Groom, M.D.
S. J. Fulton, M.D., Norwich.	6	None.	None.	1 00	None.	H. J. Spencer, M.D.
Julius G. Schmitt, M.D. 113 North Ave., Rochester.	70	1	None.	1 00	None.	
Azro C. Hanor, M.D., Chatham, Columbia Co.	15	None.	1	None.	None.	
	12	None.	None.	1 00	None.	
Abby J. Seymour, M.D., 791 Forest Ave., Buffalo.		None.	1	1 00	None.	
H. D. Schenck, M.D., 247 McDonough St.	96	12	None.	2 00	Various papers.	
Arthur B. Norton, M.D., 152 W. 34th St.	210	18	4	2 00	Trans.	
Edwin H. Wolcott, M.D., 96 East Ave., Rochester.	90	8	4	1 00	None.	
P. M. Ostrander, M.D., Nunda.	10	None.	1	None.	None.	J. A. West, M.D.
J. T. Wallace, M.D., Oneida.	11	None.	None.	None.	None.	J. T. Wallace, M.D.

LOCAL HOMŒOPATHIC MEDICAL SOCIETIES

NAME.	State.	When Organized.	When Incorporated.	Meetings.	1888 Annual Meeting.	PRESIDENT.
52. Montgomery Co. Hom. Med. Soc.	N. Y.	1880	1880		Fonda, 2d Tues, Jan.	E. H. Eisenbrey, M.D. Gloversville.
53. Medical Society of Northern N. Y.	N. Y.	1852	1857	Ann.	Saratoga.	
54. Oneida and Herkimer Counties Hom. Med. Soc.	N. Y.	1857	Not.	Quar.	Utica, 3d Tues., Oct.	W. H. Dewing, M.D., Cleyville, N. Y.
55. Onondaga County Hom. Med. Soc.	N. Y.	1868	Not.	Mth.	Syracuse, 1st Tues., May.	Arthur B. Kinne, M.D. 52 Warren St., Syracuse.
56. Ontario and Yates Counties Hom. Med. Soc.	N. Y.	1861	1862	Semi-ann.	Canandaigua, 3d Wed., Oct.	F. L. Warner, M.D., Canandaigua.
57. Orange Co. Hom. Med. Soc.	N. Y.	1851	Not.	Semi-Ann.	Goshen, 2d Tues., Feb.	Fred. W. Seward, M.D. Goshen.
58. Oswego Co. Hom. Med. Soc.	N. Y.	1861	1861	Semi-ann.	Oswego, 2d Tues., June.	T. Dwight Stow, M.D. Mexico.
59 Rensselaer County Hom. Med. Soc.	N. Y.	1859	Not.	Semi-ann.	Troy, 3d Tues., Oct.	A. R. Green, Troy.
60. Rochester Hahnemannian Society.	N. Y.	1886	Not.	Mth.	Rochester, 3d Tues., Jan.	R. C. Grant, M.D., 167 South Ave., Rochester.
61. Saratoga County Hom. Med. Soc.	N. Y.	1861	1861	Semi-ann	Saratoga Springs, 3d Tues., Mar.	
62. Schuyler County Hom. Med. Soc.	N. Y.	1870	1870	Quar.	Watkins, 2d Tues., July.	No Report.
63. Seneca Co. Hom. Med. Soc.	N. Y.	1872	1872	Semi-ann.	Waterloo, 1st Thurs., Oct.	R. B. Covert, M.D., Seneca Falls.
64. Steuben Co. Hom. Med. Soc	N. Y.	1867	1867	Quar.	Bath, 2d Tues., May.	W. E. Hathaway, M.D. Hornellsville.
65. Medical Society of Tompkins County.	N. Y.	1880	1883	Semi-ann.	Ithaca, 2d Wed., June.	C. E. Van Cleef, M.D., Ithaca.
66. Ulster Co. Hom. Med. Soc.	N. Y.	1865	Not.	Ann.	Kingston, May.	L. Shafer, M.D., Kingston.
67. Wayne Co. Hom. Med. Soc.	N. Y.	1864	Not.	Quar.	Newark, 1st Tues., June.	D. McPherson, M.D., Palmyra.
68. Westchester Co. Hom. Med. Soc.	N. Y.	1865	1865	Semi-ann.	Yonkers, Last Wed., Jan.	R. O. Phillips, M.D., Yonkers.
69. Southern Tier Hom. Med. Soc.	N. Y.	1874	1878	Quar.	Corning, 1st Tues., Jan.	B. F. Grant, M.D., Bath.
70. Cincinnati Hom. Med. Soc.	Ohio.	1860	Not.	Mth.	Cincinnati, 1st Tues., Dec.	S. R. Geiser, M.D., 303 Baymiller St.

IN THE UNITED STATES—CONTINUED.

SECRETARY.	Number of Members.	Admitted last Year.	Died last Year.	Annual Dues.	Publications last Year.	DELEGATES.
W. M. White, M.D., 40 Market St., Amsterdam.	11	1	None.	$1 00	None.	C. B. Walrad, M.D.
Azro C. Hanor, M.D., Chatham.	80	3	None.	1 00	None.	
C. E. Chase, M.D., 225 Genesee St., Utica.	20	None.	1	1 00	None.	F. Lenggenhager, M.D.
James W. Candee, M.D. 76 Warren St., Syracuse.	25	8	None.	None.	None.	A. B. Kinne, M.D.
Geo. C. Pritchard, M.D., Phelps.	24	2	None.	2 50	None.	M. B. Gault, M.D.
Floyd P. Sheldon, M.D., 143 Grand St., Newburgh.	18	4	None.	None.	None.	S. H. Talcott, M.D.
	8	None.	None.	None.	None.	
H. E. Fuller, Lansingburgh.	10	None.	1	1 00	None.	
W. H. Baker, M.D., 56 S. Clinton St., Rochester.	10	1	None.	2 00	None.	
John A. Pearsall, M.D. Saratoga Springs.	6	None.	None.	50	None.	John A. Pearsall, M.D.
O. W. Peterson, M.D., Waterloo.	10	None.	None.	2 00	None.	A. J. Trautz, M.D.
A. M. Gamman, M.D., Corning.	10	None.	None.	1 00	None.	
E. J. Morgan, Jr., M.D. Ithaca.		No Report.				
A. P. Chalker, Rondout.	4	None.	1	2 00	None.	
W. H. Sweeting, M.D. Savannah.	15	None.	None.	1 00	None.	
Geo. F. Whitney, M.D. Yonkers.	23	3	None.	1 00	None.	Richard A. Trotter, M.D.
F. L. Sutton, M.D., Canisteo.	34	1	2	1 00	None.	
J. P. Geppert, M.D., 305 Race St.	45	None.	None.	1 00	None.	J. P. Geppert, M.D.

LOCAL HOMŒOPATHIC MEDICAL SOCIETIES

NAME.	State.	When Organized.	When Incorporated.	Meetings.	1888 Annual Meeting.	PRESIDENT.
71. Eastern Ohio Hom. Med. Soc.	Ohio.	1873	Not.	Ann.	Different places.	R. T. Marks, M.D., Seetonia.
72. Lorain County Hom. Med. Soc.	Ohio.	1868	Not.	Semi-ann.	Elysia, 2d Thurs., Oct.	J. Austin, M.D., Oberlin.
73. Montgomery Co. Hom. Med. Soc.	Ohio.	1861	1870	Semi-ann.	Dayton, 1st Thurs., May	J. C. Fahnstock, M.D., Piqua.
74. Summit Co. Hom. Clinical Society.	Ohio.	1885	Not.	Mth.	Different places.	H. W. Carter, M.D., Cuyahoga Falls.
75. Allegheny County Hom. Medical Society.	Pa.	1864	Not.	Mth.	Pittsburgh, 2d Fri., Dec.	J. F. Cooper, M.D., 105 Arch Street, Allegheny.
76. Anatomical Soc. of Allegheny Co.	Pa.	1874	1875	Mth.	Pittsburgh.	John B. McClelland, M.D., Pittsburgh.
77. Alumni Ass'n of Hahnemann Med. College of Phila.	Pa.	1884	1885	Quar.	Phila., April.	John W. Dowling, M.D. 6 East 43d St., New York City.
78. Homœopathic Medical Soc. of Chester and Delaware Counties.	Pa.	1858	Not.	Quar.	Chester, April.	John Crowther, M.D., 151 E. 7th St., Chester.
79. Hom. Med. Society of Crawford Co.	Pa.	1882	Not.	Quar.	Meadville.	E. C. Parsons, M.D., Meadville.
80. Hom. Med. Society of Lehigh Valley.	Pa.	1881	Not.	Bi-mth	1st Thurs., Dec.	W. A. Seibert, M.D., Easton.
81. Hom. Med. Society of Northern Penna	Pa.	1882	Not.	Bi-mth.	Pittston, 3d Thurs., June.	Sarah J. Coe, M.D., Wilkesbarre.
82. Hahnemannian Medical Society of Reading	Pa.	1882	Not.	Mth.	Reading, 1st Thurs., June.	S. R. Rittenhouse, M.D. Reading.
83. Hom. Medical Society County of Phila.	Pa.	1866	Not.	Mth.	Philad'a, 2d Thurs., April.	W. H. Bigler, M.D., 118 N. 12th Street.
84. Hom. Medical Society 23d Ward Phila.	Pa.	1881	1881	Mth.	Philad'a.	R. C. Allen, M.D., Frankford, Phila.
85. Hom. Medical Society of Germantown.	Pa.	1879	Not.	Mth.	Germant'n.	Wm. H. Malin, M.D., Chestnut Hill, 23d Ward, Phila.
86. Philadelphia Clinical Society.	Pa.	1880	Not.	Semi-mth.	Philad'a.	C. M. Thomas, M.D., 1623 Arch Street.
87. Chattanooga Hom. Medical Society.	Tenn.	1888	Not.		Chattan'ga.	E. H. Price, M.D., Chattanooga.
88. Hom. Med. Society of Middle Tenn	Tenn.	1875	Not.	Mth.	Nashville, Oct.	Wm. C. Dake, M.D., Nashville.
89. Milwaukee Acad. of Medicine.	Wis.	1878	Not.	Mth.	Milwaukee.	Julia Ford, M.D., 375 Greenbush St.

IN THE UNITED STATES—CONTINUED.

SECRETARY.	Number of Members.	Admitted last Year.	Died last Year.	Annual Dues.	Publications last Year.	DELEGATES.
A. S. Hayden, M.D., Columbiana.	60	6	None.	None.	None.	G. E. Allen, M.D.
C. F. Cushing, M.D., Elysia.	10	None.	1	$1 00	None.	C. F. Cushing, M.D.
Frank Webster, M.D., Dayton.	42	2	1	None.	None.	Wm. Owens, Sr., M.D., H. E. Beebe, M.D.
Katharine Kurt, M.D., Akron.	11	None.	None.	None.	None.	O. D. Childs, M.D.
J. Richey Horner, M.D., 107 Arch Street, Allegheny.	54	7	None.	1 00	Sundry papers in journals.	Margaret L. Crumpton, M.D.
W. J. Martin, M.D., Pittsburgh.	18	1	None.	6 00	None.	W. J. Martin, M.D.
Wm. W. Van Baun, M.D., 419 Pine St., Philadelphia.	435		6	2 00	None.	John W. Dowling, M.D.
Samuel Starr, M.D., 215 East 5th Street, Chester.	25	1	1	1 00	Sundry papers.	J. B. Cawley, M.D.
E. H. Pond, M.D., Meadville	15	None.	None.	1 00	None.	A. Parsons, M.D.
E. D. Doolittle, M.D., Easton.	29	4	1	None.	None.	John Detwiller, M.D.
Theo. M. Johnson, M.D., Pittston.	16	8	2	2 00	None.	
C. B. Jennings, M.D., 135 S. 8th Street, Reading.	9	None.	None.	50	None.	
Wm. W. Van Baun, M.D., 419 Pine Street.	178	16	5	1 00	Various papers.	B. W. James, M.D.
J. Monroe Beyer, M.D. Bustleton, Phila.	16	1	None.	5 00	None.	C. Van Artsdalen, M.D., C. Weaver, M.D.
W. H. Barnes, M.D., 3242 Germantown Road, Philadelphia.		No	Repo	rt.		
W. H. Bigler, M.D., 118 North 12th Street.	10	None.	None.	1 00	None.	C. M. Thomas, M.D.
G. E. Harrison, M.D., Chattanooga.	6	6	None.	Ass'ss	None.	
Walter M. Dake, M.D., Nashville.	10	None,	None.	None.	None.	J. P. Dake, M.D.
E. W. Beebe, M.D., 173 Wisconsin Street.	20	None.	None.	1 00	None.	Lewis Sherman, M.D.

HOMŒOPATHIC MEDICAL CLUBS

Name.	State.	When Organized.	When Incorporated.	Meetings.	1888 Annual Meeting.	President.
1. Washington Med. and Surgical Club.	D. C.	1886	Not.	Mth.	Washington, 2d Thurs., Dec.	L. E. Rauterberg, M.D. 510 Fifth St., N. W.
2. Atlanta Medical Club.	Ga.	1882	Not.	Quar.	Atlanta.	John Z. Lawshé, M.D. 3½ Whitehall St.
3. Boston Gynæcological Club.	Mass.	1881	Not.	Mth.	Boston.	J. K. Warren, M.D., Worcester.
4. Hughes Medical Club.	Mass.	1878	Not.	Semi-mth.	Boston, 4th Mon., May.	Appointed at each meeting.
5. Lowell Hahnemann Club.	Mass.	1881	Not.	Mth.	Lowell, 3d Tues., Nov.	F. A. Warner, M.D., 42 Kirk St., Lowell.
6. Medical Investigation Club.	Md.	1881	Not.	W'ky	Baltimore.	Elected at each meeting.
7. Hahnemann Club of St. Louis.	Mo.	1873	Not.	Semi-mth.	St. Louis.	Chosen at each meeting.
8. Hahnemann Med. Club of Plainfield.	N. J.	1885	Not.	Mth.	Plainfield, 2d Wed., Oct.	T. S. Davis, M.D., Plainfield.
9. New Jersey Med. Club.	N. J.	1869	Not.	Mth.	3d Wed., Dec.	Geo. W. Richards, M.D., Orange.
10. Carroll Dunham Medical Club.	N. Y.	1883	Not.	Mth.	New York, 1st Tues., Jan.	Chosen at each meeting.
11. New York Society for Medico Scientific Investigation.	N. Y.	1883	Not.	Mth.	New York, 1st Tues., Dec.	W. W. Blackman, M.D., 372 Adelphi St., Brooklyn.
12. New York Hom. Union.	N. Y.	1888	Not.	Mth.	New York, April.	Edward Bayard, M.D., 8 West 40th St.
13. Syracuse Hahnemann Club.	N. Y.	1888	Not.	W'ky	Syracuse, last Friday, Feb.	S. Seward, M.D., 11 Onondaga St., Syracuse.
14. Organon Club of Chester.	Pa.	1887	Not.	Semi-mth.	Chester, Feb.	Robert P. Mercer, M.D., Chester.
15. Benninghausen Club of Philadelphia.	Pa.	1887	Not.	Mth.	Philadelphia, 2d Wed., Nov.	H. Noah Martin, M.D. 1218 Walnut St.
16. Hahnemann Club of Philadelphia.	Pa.	1873	Not.	Mth.	Philadelphia, 2d Tues., Jan.	Aug. Korndoerfer, M.D., 648 N. 12th St.
17. Farrington Materia Medica Club of Allegheny Co.	Pa.	1888	Not.	Semi-mth.	Pittsburgh.	John L. Ferson, M.D., 137 Wylie Ave., Pittsburgh.

IN THE UNITED STATES.

Secretary.	Number of Members.	Admitted last Year.	Died last Year.	Annual Dues.	Publications last Year.	Delegates.
Wm. R. King, M.D., 812 Eleventh St.	12	None.	None.	$2 00	None.	Wm. R. King, M.D.
M W. Manahan, M.D. 18 N. Broad St.	7	2	None.	None.	None.	F. H. Orme, M.D.
Lester A. Phillips, M.D., 165 Boylston St., Boston.	9	1	None.	None.	Sundry papers.	Lester A. Phillips, M.D.
Fred. D. Stackpole, M.D., 23 W. Cedar St., Boston.	15	1	None.	None.	None.	
A. W. Hills, M.D., 27 Church St., Lowell.	8	1	None.	2 00	Various papers in journals.	F. A. Warner, M.D.
	7	1	None.	None.	None.	
Jas. A. Campbell, M.D. 1729 Washington Ave.	10	None.	None.	None.	Various papers.	James A. Campbell, M.D.
Edw. Rushmore, M.D. Plainfield.	10	3	None.	None.	None.	
John Younglove, M.D. Elizabeth.	15	None.	None.	25	None.	F. Nichols, M.D.
Joseph F. Land, M.D., 130 W. 126th St.	8	1	1	None.	None.	T. Franklin Smith. M.D.
E. J. Pratt, M.D., 12 West 39th St., New York.	52	20	None.	1 00	Sundry papers.	
Clarence W. Butler, M.D., Montclair, N. J.	27	27	None.	None.	None.	Clarence W. Butler, M.D.
Fred'ick Hooker, M.D. 62 Warren St., Syracuse.	17	17	None.	None.	Trans.	
Daniel Maddux, M.D. Chester.	6	None.	None.	None.	None.	
Geo. W. Smith, M D., 1320 Walnut St.	10	None.	None.	6 00	Various papers in journals.	
Thos. S. Dunning, M.D. 1328 N. 15th St.	11	None.	None.	None.	None.	
James H. Thompson, M.D., 960 Penn Ave., Pittsburgh.	12	None.	None.	Ass'ts	Sundry papers in journals.	W. J. Martin, M.D.

MISCELLANEOUS HOMŒOPATHIC MEDICAL

Name.	State.	When Organized.	When Incorporated.	Meetings.	1888 Annual Meeting.	President.
1. Homœopathic Aid Association.	Ill.	1886	1886		Chicago, 3d Tues. Jan.	A. L. Sweet, Chicago.
2. Homœopathic Pharmaceutical Assoc'n of Pennsylvania.	Pa.	1881	1881		Philadelphia.	A. J. Tafel, Philadelphia.

GENERAL HOMŒOPATHIC HOSPITALS

Name.	Where Located.	State.	When Incorporated.	When Opened.	Secretary or Executive Officer.	Number of Beds.	Number of Patients Last Year.
1. Hahnemann Hospital.	San Francisco.	Cal.	1887	1887	Geo. H. Martin, M.D., 921 Geary Street.	8	23
2. Fabiola Hospital Association.	Oakland.	Cal.	1876	1876	Mrs. John Yule, 562 8th St., Oakland.	40	48
3. Hom. Hospital of Delaware.	Wilm'ngton	Del.[a]	1888	1888	Kate G. Stone.	11	50
4. National Hom. Hospital Ass'n.	Washington	D. C.	1881	1884	C. W. Sonnenschmidt, M.D.	30	1356
5. St. Luke's Hos., Homœopathic Department.	Jacksonville.	Fla.	Not.	1878	H. R. Stout, M.D., Jacksonville.		4
6. Hahnemann Hospital.	Chicago.	Ill.	1855	1870	G. F. Shears, M.D., 3130 Indiana Ave.	80	370
7. Cook Co Hospital Hom. Departm't.	Chicago.	Ill.	Not.	1882	John Stephens.	120	1683
8. Hom. Hospital of Iowa City.	Iowa City.	Iowa.	1887	1887	J. G. Gilchrist, M.D., Iowa City.	12	64
9. Massachusetts Hom. Hospital.	Boston.	Mass.	1855	1871	Thomas B. Tichnor. 211 Tremont Street.	100	501
10. Hom. Hos. of Univ. of Mich.	Ann Arbor.	Mich.	1878	1878	James C. Wood, M.D., Ann Arbor.	50	360
11. Hom. Hospital of Minneapolis.	Minneapolis.	Minn.	1883	1881	O. J. Griffith, Minneapolis.	40	354
12. Good Samaritan Hospital.	St. Louis.	Mo.	1857	1857	Jas. A. Campbell, M.D. 1729 Washington Ave.	125	210

ASSOCIATIONS IN THE UNITED STATES.

Secretary.	Number of Members.	Admitted last Year.	Died last Year.	Annual Dues.	Publications last Year.	Delegates.
M. J. McGrath, 100 State St., Chicago.		No	Repo	rt.		
F. J. Slough, M.D., Allentown.	10	None.	None.	None.	None.	F. J. Slough, M.D.

IN THE UNITED STATES.

Cured.	Relieved.	Not Relieved.	Died.	Value of Hospital and Grounds.	Amount of Debt.	Amount of Invested Property.	Sources of Income.	Delegates.
14	6	2	1		None.		Pay of Patients.	W. A. Denny, M.D.
20	10	2	7	$25,000	$4,000		Voluntary contributions and patients' fees.	
49			1					Opened Jan. 1st, 1883.
1319	14	19	4	60,000	3,000	None.	Appropriat'ns and donations.	T. S. Verdi, M.D., J. B. Gregg Custis, M.D.
3			1				Donations and Board of Patients.	H. R. Stout, M.D.
367			3	6,000	None.	None.	Donations and Board of Patients.	
752	124		139					
22	18	10	1		None.	None.	Students' fees, Board of Patients, Subscriptions.	A. C. Cowperthwaite, M.D.
343	109	15	16	200,000	None.	$100,000	Subscriptions and donations.	D. G. Woodvine, M.D.
175	170	14	1	25,000	None.		State Charities	D. A. McLachlan, M.D.
287	38		29	100,000	15,000	None.	Contributions and patients' fees.	Geo. F. Roberts, M.D.
123	15	3	23	41,000	None.	None.	Board of Patients.	Jas. A. Campbell, M.D.

GENERAL HOMŒOPATHIC HOSPITALS

Name.	Where Located.	State.	When Incorporated.	When Opened.	Secretary or Executive Officer.	Number of Beds.	Number of Patients Last Year.
13. St. Louis Children's Hos.	St. Louis.	Mo.	1879	1879	C. H. Goodman, M.D., 2728 Washington Ave.	25	94
14. Camden Hom. Hospital	Camden.	N. J.	1885	1885	A. E. Street, D.D.S., 300 Broadway.		505
15. Albany City Hom. Hospital.	Albany.	N. Y.	1872	1873	J. W. Cox, Jr., M.D., 109 State Street.	42	200
16. Buffalo Hom. Hospital.	Buffalo.	N. Y.	1873	1872	S. V. Parsons, 490 Delaware Ave.	54	295
17. Brooklyn Hom. Hospital.	Brooklyn.	N. Y.	1871	1871	Albert H. Smith, 204 Washington Park.	100	566
18. Hom. Hospital of Ward's Island.	New York.	N. Y.	Not.	1875	Alfred K. Hills, M.D.	570	3394
19. Hahnemann Hospital.	New York.	N. Y.	1875	1875	F. E. Doughty, M.D., 512 Madison Avenue.	65	176
20. Laura Franklin Hospital for Children.	New York.	N. Y.	1886	1886	T. F. Allen, M.D., 10 E. 36th Street.	52	161
21. Cleveland Hom. Hospital.	Cleveland.	Ohio.	1867	1869	Harlan Pomeroy, M.D. 526 Prospect Street.	75	373
22. Ohio Hospital for Women and Children.	Cincinnati.	Ohio.	1881	1883	Mrs. David Wilson, Mount Hope Road, Pine Hill, Cincinnati.	13	65
23. Protestant Hospital.	Toledo.	Ohio.	1876	1874	Mrs A. E. Scott, 721 Ontario Street.	20	80
24. Hahnemann Med. College Hospital.	Philadelphia.	Pa.	1869	1871	Wm. C. Hannis, 323 Walnut Street.	25	246
25. Medical, Surgical and Maternity Hos. of the Woman's Hom. Ass'n of Penna.	Philadelphia.	Pa.	1882	1884	Mrs. R. Weston, 210 S. 41st Street.	60	143
26. Children's Hom. Hos. of Phila.	Philadelphia.	Pa.	1877	1877	H. D. Brown, 520 Commerce Street.	60	122

IN THE UNITED STATES—CONTINUED.

Cured.	Relieved.	Not Relieved.	Died.	Value of Hospital and Grounds.	Amount of Debt.	Amount of Invested Property.	Source of Income.	DELEGATES.
71	19	1	3	$20,000	None.	None.	Voluntary contributions.	
489			3	10,000	$6,000	None.	Private subscriptions.	M. F. Middleton, M.D.
160	40			18,500	12,000	$200	City appropriations and private subscriptions.	L. M. Pratt, M.D.
119	44	9	13	24,000	1000		City and County appropriations and Board of Patients.	
388	73	20	38	75,000	8000	7340 09	Charity, donations, fees, Board of Patients.	
1497	1475	156	266		None.		Department Public Charities and Correction.	
83	73	5	15	150,000	None.	None.	Donations and Board of Patients.	
81	31	6	7	125,000	None.	None.	Endowment.	T. F. Allen, M.D.
220	81	13	24	125,000	8000	None.	Voluntary contributions and Board of Patients.	Harlan Pomeroy, M.D.
48	12	3	2		None.	None.	Donations.	Wm. Owens, Sr, M.D.
72			8	8,000	None.	None.	Voluntary contributions and Board of Patients.	
215	11	4	2	242,700	110,000	125,000	Subscriptions, rents, donat'ns.	C. Mohr, M.D.
106	29	3	5	130,000	35,000	7000	Donations and Board of Patients.	
91	28		3	45,000	11,000	None.	Contributions.	Clarence Bartlett, M.D.

GENERAL HOMŒOPATHIC HOSPITALS

Name.	Where Located.	State.	When Incorporated.	When Opened.	Secretary or Executive Officer.	Number of Beds.	Number of Patients last Year.
27. Hom. Med. and Surgical Hospital and Dispensary of Pittsburgh.	Pittsburgh.	Pa.	1866	1866	Geo. L. McCay.	127	1227
28. Rhode Island Hom. Hospital.	Providence.	R. I.	1878	1886	Charles E. Carpenter, Providence.	18	46

SPECIAL HOMŒOPATHIC HOSPITALS

1. Chicago Nursery and Half Orphan Asylum.	Chicago.	Ill.	1860	1859	Mrs. F. H. Beckwick, 77 Pine St.	175	400
2. Foundlings' Home.	Chicago.	Ill.	1872	1871	Geo. E. Shipman, M.D. 120 S. Wood St.	130	436
3. Illinois State Penitentiary Hospital.	Joliet.	Ill.	Not.	1860	M. B. Campbell, M.D., Joliet.	17	1272
4. Kansas Surgical Hospital.	Topeka.	Kan.	1882	1882	Henry W. Roby, M.D., Topeka.	8	390
5. Consumptives' Home.	Boston.	Mass.	1871	1864	Charles Cullis, M.D.	70	169
6. Temporary Home N. E. Moral Reform Society.	Boston.	Mass.	1846	1846	Mrs. Rev. C. L. Eastman, Boston.	8	36
7. Murdock Free Surgical Hospital for Women.	Boston.	Mass.	1885	1885	A. L. Murdock.	56	953
8. Westborough Insane Hospital.	Westborough.	Mass.	1884	1886	N. Emmons Paine, M.D., Westborough.	400	432
9. Church Home for Babies.	Minneapolis.	Minn.	Not.	1885	Sister Annette Rolf.	15	32
10. Maternity Hospital.	Minneapolis.	Minn.	1887	1886	Martha G. Ripley, M.D. 48 Eighth St.	20	72
11. Newark Orphan Asylum.	Newark.	N. J.	1849	1849	Miss S. A. Ricord.	92	40
12. Albany House of Shelter.	Albany.	N. Y.	1869	1868	Miss Mary L. Dare, 52 Howard St.	30	90
13. New York State Asylum for Chronic Insane.	Binghamton.	N. Y.	1879	1881	T. S. Armstrong, M.D. Binghamton.	1000	1208
14. Brooklyn Home for Consumptives	Brooklyn.	N. Y.	1881	1881	Mrs. J. H. Burtis, 121 Quincy St.	28	42
15. Brooklyn Maternity and N. Y. State School for Training Nurses.	Brooklyn.	N. Y.	1871	1871	Mrs. J. T. Howard, 174 Hicks St.	52	372

IN THE UNITED STATES—CONTINUED.

Cured.	Relieved.	Not Relieved.	Died.	Value of Hospital and Grounds.	Amount of Debt.	Amount of Invested Property.	Sources of Income.	DELEGATES.
975	69	19	87	$160,000	$35,685,17	None.	State aid, contributions, fees from patients.	J. H. McClelland, M.D.
30	4	3	1	33,700	23,500	$12,000	Donations and Board of Patients.	Geo. B. Peck, M.D.

IN THE UNITED STATES.

289		11	11	$100,000	None.	$42,000	Donations.	H. M. Hobart, M.D.
393			43	125,000	None.	None.	Contributions.	
1198	30		44		None.	None.	State contracts.	M. B. Campbell, M.D.
363	19	5	3	25,000	$4,000	50,000	Real estate and fees.	H. W. Roby, M.D.
	15	62	49	160,000	60,000	None.	Voluntary contributions.	
36				20,000	None.	None.	Voluntary contributions.	Laura M. Porter, M.D.
944			9		None.	None.	Supported by Murdock's Liquid Food Co.	
55	36	13	19	400,000	None.		State & town appropriations and Board of Patients.	N. Emmons Paine, M.D.
15	8		8	4,000	2,000	None.	Donations and Board of Patients.	
45			8	10,000	8,000	None.	Voluntary contributions.	
40				100,000	None.	52,000	Contributions.	
90				25,000	None.	None.	Donations.	Clarence M. Paine, M D.
10	47	15	87	600,000	None.		Board of Patients and farm products.	
3	7	3	15	13,000	None.	None.	Contributions.	
170	178	14	10	50,000	4,000	None.	Contributions and appropriations.	

SPECIAL HOMŒOPATHIC HOSPITALS

Name.	Where Located.	State.	When Incorporated.	When Opened.	Secretary or Executive Officer.	Number of Beds.	Number of Patients Last Year.
16. New York State Hom. Asylum for the Insane.	Middletown	N. Y.	1870	1874	Selden H. Talcott, M.D., Middletown.	525	642
17. Helmuth House.	New York.	N. Y.	Not.	1886	S. H. Knight, M.D., 41 East 12th Street.	30	130
18. Hospital of Five Points House of Industry.	New York.	N. Y.	1854	1861	William F. Barnard, 155 North Street.	87	1203
19. House of the Good Samaritan Deaconesses.	New York.	N. Y.	Not.	1887	E. Guernsey Rankin, M D., Fifth Avenue.		
20. New York Ophthalmic Hospital	New York.	N. Y.	1852	1852	R. C. Root.	43	10,739
21. New York Med. College and Hospital for Women.	New York.	N. Y.	1863	1863	Amelia Wright, M.D., 221 West 34th Street.	24	189
22. Faxton Hospital.	Utica.	N. Y.	1873	1875	Mrs. M. L. Shover.	60	50
23. Boys' Home.	Allegheny.	Pa.	1886	1887		38	10
24. Christian Home.	Allegheny.	Pa.	1872	1872	Mrs. Felix R. Bruno, 50 Stockton Avenue.	40	98
25. Colored Orphan Asylum.	Allegheny.	Pa.	1879	1879	Mrs. O. Phillips, Ridge Avenue.	60	70
26. Home for the Aged Poor conducted by Little Sisters of the Poor	Allegheny.	Pa.	1878	1872	Sister Anne of St. Theresa.		58
27. Convent of Benedictine Sisters Dispensary.	Erie.	Pa.	Not.	1865		8	26
28. Home for the Aged Poor conducted by Little Sisters of the Poor	Pittsburgh.	Pa.	Not.	1884	Sister Lambertine.		41
29. Protestant Home for Incurables.	Pittsburgh.	Pa.	1883	1885	Miss Mary E. McCandless, Winchbiddle Avenue.	65	29
30. Babies' Home.	Milwaukee.	Wis.	1884	1884	Miss C. H. Ross, 514 Broadway.	15	60
31. Milwaukee Orphan Asylum.	Milwaukee.	Wis.	1852	1850	Miss M. P. Mason, 350 Juneau Avenue.	7	20
32. St. John's Home.	Milwaukee.	Wis.	1868	1868			
33. St. Vincent's Infant Asylum.	Milwaukee.	Wis.	Not.	1878	Sister Mary, 3d and Greenfield Ave.	45	

IN THE UNITED STATES—CONTINUED.

Cured.	Relieved.	Not Relieved.	Died.	Value of Hospital and Grounds.	Amount of Debt.	Value of Invested Property.	Source of Income.	DELEGATES.
96	23	46	22	$666,525	None.		Board of Patients and farm products.	S. H. Talcott, M.D.
100	20		5		None.	None.	Patients' fees.	W. T. Helmuth, M.D.
1201			2	150,000	None.	None.	Appropriat'ns and contributions.	
Rep	ort r the	ef u Ins	sed titu	because te last y	of insult ear to D	said to rs. E. Gu	have been giv ernsey and A.	en by K. Hills.
8000	900		None	115,000	22,000	$158 91	Voluntary contributions.	
121	36	9	5		None.	None.	Contributions and Board of Patients.	
30	18	2		40,000	None.	None.	Endowment and contributions.	M. O. Terry, M.D.
10				22,000	None.	None.	Board of Patients and donations.	J. Richey Homer, M.D.
84	3	10	1	25,000	None.	None.	Board of Patients and donations.	J. Richey Homer, M.D.
67	1		2	18,000	None.	10,000	Donations and subscriptions.	L. H. Willard, M.D.
11	25	3	19		None.		Voluntary contributions.	L. G. Rousseau, M.D.
20	6				None.		Voluntary contributions.	Edward Cranch, M.D.
10	13	1	17		None.		Voluntary contributions.	L. G. Rousseau, M.D.
	28		1	70,000	None.	50,000	Voluntary contributions.	
41			19	6,000	None.	6,080 14	Funds and subscriptions.	F. D. Brooks, M.D.
19			1	25,000	None.	None.	Contributions.	O. W. Carlson, M.D.
	Nu	mb tha	er o tno	f cases tr record o	eated las f them w	t year so as kept.	small	
				25,000	None.	None.	Private charity.	Joseph Lewis, Jr., M.D.

HOMŒOPATHIC DISPENSARIES

Name.	Where Located.	State.	When Incorporated.	When Opened for Patients.	Secretary or Executive Officer.
1. Oakland Homœopathic Dispensary.	Oakland.	Cal.	1876	1876	Mrs. John Yule, 562 Eighth St.
2. Hahnemann Dispensary.	San Francisco.	Cal.	1887	1888	James M. Ward, M.D., 335 Geary St.
3. Pacific Homœopathic Dispensary.	San Francisco.	Cal.	1876	1877	Miss H. Taylor, 204 Lombard St.
4. Homœopathic Free Dispensary.	Washington	D. C.	1882	1882	Mrs. Isabella M. Bittinger, 301 Tenth St., S. W.
5. Central Hom. Free Dispensary.	Chicago.	Ill.	1855	1854	Mrs. C. H. Kingman, 2205 Calumet Av.
6. Rock Island Free Hom. Med. Dispensary.	Rock Island	Ill.	Not.	1882	C. A. Paul, M.D., Rock Island.
7. Homœopathic Dispensary.	Iowa City.	Iowa.	1877	1877	A. C. Cowperthwaite, M.D., Iowa City.
8. Samaritan Mission and Free Dispensary.	Kansas City	Kans.	1883	1881	Emily P. Newcombe, M.D., 150 Wood St.
9. Homœopathic Free Dispensary of Baltimore.	Baltimore.	Md.	1877	1878	Marbury Brewer, M.D., 1106 McCulloh St.
10. Hom. Medical Dispensary.	Boston.	Mass.	1856	1857	I. T. Talbot, M.D., 66 Marlborough St.
11. Hom. Med. Dispensary, West End Branch.	Boston.	Mass.	1856	1875	I. T. Talbot, M.D., 66 Marlborough St.
12. Hom. Med. Dispensary College Branch.	Boston.	Mass.	1856	1872	I. T. Talbot, M.D., 66 Marlborough St.
13. Roxbury Hom. Dispensary.	Roxbury.	Mass.	1887	1887	Albert C. Burrage, 29 Cedar St.
14. Worcester Hom. Free Dispensary.	Worcester.	Mass.	1885	1880	C. Otis Goodwin, M.D., Worcester.
15. Univer'ty of Mich. Free Hom. Dispensary.	Ann Arbor.	Mich.	1875	1879	James C. Wood, M.D., 66 South Fourth St.
16. Free Hom. Dispensary.	St. Paul.	Minn.	Not.	1887	
17. Hom. Free Dispensary.	St. Louis.	Mo.	Not.	1878	James A. Campbell, M.D. 1729 Washington Ave.
18. Camden Hom. Dispensary.	Camden.	N. J.	1885	1885	A. E. Street, D.D.S., 300 Broadway.
19. Avenue "A" Hom. Dispensary.	New York.	N. Y.	1883	1882	Miss Huntington, Wilson Mission.

IN THE UNITED STATES.

Number of Patients Treated Last Year.	Number of Prescriptions.	Cost of Conducting Last Year.	Amount of Funds.	Amount of Debt.	Remarks.	DELEGATES.
119	507				Conducted in connection with the hospital.	
450	720	$540 00	None.	None.		James M. Ward, M.D.
No Report.						
2921	8840	709 36	$1000 00	None.		
1056	5029	2500 00	2400 00	None.		
987	1756	343 75	None.	None.		W. A. Paul, M.D.
320	981		None.	None.	Belongs to State University.	A. C. Cowperthwaite, M.D.
720	2260	350 00	None.	None.		
7385	22,228	1400 00	None.	None.		
1337	4508	200 00	20,000 00	None.		A. L. Kennedy, M.D.
4891	9807	340 00	None.	None.		A. L. Kennedy, M.D.
9005	27,362	920 00	None.	None.		A. L. Kennedy, M.D.
1952	5894	754 42	1500 00	None.		
213	503	120 00	5000 00	None.		
502	2596		None.	None.	State Endowment.	
No Report.						
3300	10,000	150 00	None.	None.		Jas. A. Campbell, M.D.
2389	6000				1887 visits made to outside patients.	M. F. Middleton, M.D.
600	1600	80 00	None.	None.		T. F. Allen, M.D.

HOMŒOPATHIC DISPENSARIES

Name.	Where Located.	State.	When Incorporated.	When Opened for Patients.	Secretary or Executive Officer.
20. Bayard Hom. Dispensary.	New York.	N. Y.	1887	1886	Mrs. Wm. Gardner, 47 West 42d Street.
21. Dispensary of New York Medical College and Hospital for Women.	New York.	N. Y.	1863	1863	Julia M. Goodman, M.D., 213 West 54th Street.
22. Harlem Hom. Dispensary.	New York.	N. Y.	1872	1872	J. E. McMichael, M.D., 23 East 126th Street.
23. New York Hom. Medical College Dispensary.	New York.	N. Y.	1859	1859	John W. Dowling, M.D., 6 East 43d Street.
24. Tompkins' Square Hom. Dispensary.	New York.	N. Y.	1874	1863	Edward T. Orrel, 9 Chambers Street.
25. Western Hom. Dispensary.	New York.	N. Y.	1868	1868	R. W. Gilbert, Union League Club, 5th Avenue and 39th Street.
26. Yorkville Hom. Dispensary.	New York.	N. Y.	1871	1871	Samuel Thomson, 1475 Third Avenue.
27. Yorkville Hom. Dispensary.	New York.	N. Y.	Not.	1883	A. R. McMichael, M.D., 969 Madison Avenue.
28. Albany City Hom. Dispensary.	Albany.	N. Y.	1868	1868	J. W. Cox, Jr., M.D., 109 State Street.
29. Brooklyn Hom. Hos. Dispensary.	Brooklyn.	N. Y.	1852	1853	Wm. E. McCune, M.D., 53 Orange Street.
30. Brooklyn E. D. Hom. Dispensary.	Brooklyn.	N. Y.	1872	1872	Geo. V. Tompkins, 96 Wilson Street.
31. Gates Ave. Hom. Dispensary.	Brooklyn.	N. Y.	1867	1867	V. Aldridge, 12 Court Street.
32. Buffalo Hom. Eye and Ear Dispensary.	Buffalo.	N. Y.	1882	1882	F. Park Lewis, M.D., 188 Franklin Street.
33. Hom. Free Dispensary.	Rochester.	N. Y.	Not.	1883	R. C. Grant, M.D., 167 South Avenue.
34. Akron Free Hom. Dispensary.	Akron.	Ohio.	1883	1883	Mrs. G. A. Kohler, Akron.
35. Hom. Free Dispensary.	Cincinnati.	Ohio.	1867	1867	J. M. Crawford, 136 Garfield Place.
36. Free Dispensary for Women and Children.	Cincinnati.	Ohio.	1881	1880	Mrs. J. Gorshorn, 380 West 8th Street.

IN THE UNITED STATES—CONTINUED.

Number of Patients Treated Last Year.	Number of Prescriptions.	Cost of Conducting Last Year.	Amount of Funds.	Amount of Debt.	Remarks.	DELEGATES.
585	1000	$199 31	$50 00	None.	Nothing but the high potencies and the single remedy given	C. E. Howard, M.D.
1465	5095				Separate accounts are not kept for hospital and dispensary.	
1897	5330	350 00	None.	None.		
8000	30,000		None.	None.		John W. Dowling, M.D.
8324	20,482	542 22	None.	$2960 26	Closed in March, 1888, for want of funds.	
5690	12,786					A. C. Root, M.D.
6077	9557	325 00	None.	None.		
1200	1700		None.	None.	Connected with the hospital.	Geo. E. Gorham, M.D.
6589	19,247		None.	None.	Supported by hospital.	
9300	12,000		None.	None.		
6541	14,451	800 00	500 00	4000 00	Doing a good work.	
400	3500	200 00	None.	None.		F. Park Lewis, M.D.
833	2417	325 00	None.	None.	Sustained by voluntary subscriptions.	
136	479	23 58	35 84	None.		
3000	10,000	500 00	None.	None.		
300	1200				Connected with hospital.	

HOMŒOPATHIC DISPENSARIES

Name.	Where Located.	State.	When Incorporated.	When Opened for Patients.	Secretary or Executive Officer.
37. Free Medical and Surgical Dispensary for Women and Children.	Cleveland.	Ohio.	Not.	1878	Martha M. Stone, M.D., 190 Prospect Street.
38. Good Samaritan Hom. Dispensary.	Cleveland.	Ohio.	1849	1849	Wm. T. Miller, 661 Superior Street.
39. Allentown Hom. Dispensary.	Allentown.	Penna.	Not.	1883	A. L. Kistler, M.D., 115 North 9th Street.
40. Hom. Dispensary of Germantown.	Germant'n.	Penna.	Not.	1883	Henry K. Mansfield, M.D., 4667 Main Street.
41. Hahnemann Medical College Dispensary of Philadelphia.	Philadelphia.	Penna.	1848	1848	William C. Hannis, 323 Walnut Street.
42. Hom. Medical and Surgical Hospital and Dispensary of Pittsburgh.	Pittsburgh.	Penna.	1866	1866	George L. McCoy, Pittsburgh.
43. Providence Free Hom. Dispensary.	Providence.	R. I.	1884	1874	Charles W. Bowen, 307 Westminster St.

IN THE UNITED STATES—CONTINUED.

Number of Patients Treated Last Year.	Number of Prescriptions.	Cost of Conducting Last Year.	Amount of Funds.	Amount of Debt.	Remarks.	DELEGATES.
3945	4995	$928 71	$41 22	None.	Conducted by ladies belonging to the medical profession, and is supported entirely by private subscriptions.	
1385	10,414	719 54	None.	None.	Supported by Cleveland Hom. Hospital.	
396	2580	300 00	None.	None.		
	No Re	port.				
16,923	23,866	1000 00	None.	None.	3046 outside visits made.	Charles Mohr, M.D.
22,090	29,705		None.	None.	Connected with the hospital.	J. H. McClelland, M.D.
1220	1561	743 69	936 55	None.		Geo. B. Peck, M.D.

HOMŒOPATHIC JOURNALS

Name.	Publisher.	Editor.
1. The American Homœopathist.	A. L. Chatterton & Co., 78 Maiden Lane, New York.	Frank Kraft, M.D., Sylvania, Ohio.
2. The California Homœopath.	Boericke & Schreck, 234 Sutter St., San Francisco.	Wm. Boericke, M.D., 834 Sutter St., San Francisco.
3. The Chironian.	Students of New York, Hom. Medical College.	
4. The Clinique.	E. S. Bailey, M.D., 3034 Michigan Ave., Chicago.	R. Ludlam, M.D., 1823 Michigan Ave., Chicago, Ill.
5. The Hahnemannian Monthly.	Hahnemannian Monthly, 1506 Girard Ave., Phila., Pa.	Clarence Bartlett, M.D., Wm. B. Van Lennep, M.D.
6. The Homœopathic Expositor.	E. J. Morgan, Jr., M.D., Ithaca, N. Y.	E. J. Morgan, Jr., M.D., Ithaca, N. Y.
7. The Homœopathic Journal of Obstetrics, Gynæcology and Pædology.	A. L. Chatterton & Co., 78 Maiden Lane, New York.	Philip Porter, M.D., 33 East Adams Ave., Detroit, Mich.
8. The Homœopathic Physician.	Edmund J. Lee, M.D., 1123 Spruce St., Phila., Penna.	Edmund J. Lee, M.D., 1123 Spruce St., Phila., Penna.
9. The Homœopathic Recorder.	Boericke & Tafel, 1011 Arch St., Phila., Penna.	J. T. O'Connor. M.D., 19 West 46th St., New York.
10. The Medical Advance.	W. A. Chatterton, 56 Wabash Ave., Chicago, Ill.	H. C. Allen, M.D., Ann Arbor, Mich.
11. The Medical Call.	Discontinued.	
12. The Medical Counsellor.	Medical Counsellor Publishing Co., Ann Arbor, Mich.	D. A. McLachlan, M.D., Ann Arbor, Mich.
13. The Medical Current.	W. A. Chatterton & Co., 56 Wabash Ave., Chicago, Ill.	F. A. Newman, M.D.
14. The Medical Era.	Gross & Dellbridge, 48 Madison St., Chicago, Ill.	Chas. Gatchell, M.D., Joseph Gross, M.D.
15. The Medical Institute.	A. E. Davis, 1231 Filbert St., Phila., Penna.	J. S. Ballard, M.D., 222 N. Broad St., Phila, Penna.
16. The Medical Visitor.	T. S. Hoyne, M.D., 1833 Indiana Ave., Chicago.	T. S. Hoyne, M.D., 1833 Indiana Ave., Chicago.
17. The Minnesota Medical Monthly.	Homœopathic Publishing Co., Minneapolis, Minn.	Wm. E. Leonard, M.D., 72 and 73 Syndicate Block, Minneapolis.
18. The New England Medical Gazette.	Otis Clapp & Son, 10 Park Square, Boston, Mass.	John P. Sutherland, M.D., 10 Park Square, Boston, Mass.

IN THE UNITED STATES.

When Established.	How often Published.	Number of Copies Published.	Form.	Yearly Number of Pages.	Subscription Price.	DELEGATES.
1877	Monthly.	2300	Octavo.	672	$2 00	Frank Kraft, M.D.
1882	Monthly.	1000	Octavo.	384	2 00	
1884	Semi-monthly.	1000	Quarto.	240	1 50	G. D. W. Hallett.
1879	Monthly.	1500	Octavo.	384	1 00	R. Ludlam, M.D.
1865	Monthly.		Octavo.	1152	3 00	Clarence Bartlett, M.D.
1878	Quarterly.		Octavo.	96	50	
1879	Bi-monthly.	3000	Octavo.	1152	4 00	Philip Porter, M.D.
1881	Monthly.		Octavo.	480	2 50	
1886	Bi-monthly.	8625	Octavo.	576	1 00	
1873	Monthly.		Octavo.	1152	3 00	
	Monthly.	2150	Octavo.	576	2 00	
1885	Semi-monthly.		Quarto.	192	1 00	
1882	Monthly.	3500	Quarto.	384	2 00	Joseph Gross, M.D.
1886	Monthly.	3000	Quarto.	344	1 00	
1885	Monthly.	2000	Octavo.	432	1 00	
1886	Monthly.	1000	Octavo.	360	1 00	
1865	Monthly.	1000	Octavo.	576	2 00	

HOMŒOPATHIC JOURNALS

NAME.	PUBLISHER.	EDITOR.
19. The New York Medical Times.		Egbert Guernsey, M.D., Alfred K. Hills, M.D.
20. The North American Journal of Homœopathy.	Journal Publishing Club, 152 West 34th Street, New York.	Geo. M. Dillow, M.D., and others.
21. The Physicians' and Surgeons' Investigator.	A. L. Chatterton & Co., 78 Maiden Lane, New York.	Louis A. Bull, M.D., 160 Franklin Street, Buffalo, N. Y.
22. The Southern Journal of Homœopathy.	Charles E. Fisher, M.D., Austin, Texas.	Charles E. Fisher, M.D., Austin, Texas.
23. The United States Medical Investigator.	Duncan Bros., 56 State St., Chicago, Ill.	T. C. Duncan, M.D., 56 State St., Chicago, Ill.

IN THE UNITED STATES—CONTINUED.

When Established.	How often Published.	Number of Copies Published.	Form.	Yearly Number of Pages.	Subscription Price.	DELEGATES.
	No Report.					
1852	Monthly.		Octavo.	1296	$3 00	Arthur B. Norton, M.D.
1879	Monthly.	1000	Octavo.	384	1 00	Louis A. Bull, M.D.
1883	Monthly.	1000	Octavo.	576	2 00	
1860	Monthly.		Octavo.	768	2 00	

HOMŒOPATHIC MEDICAL COLLEGES

Name of College or Medical School.	Where Located	When Incorporated.	When Students first Admitted.	Name and Address of Dean.	Length of Each Yearly Course and time it commences.
1. Hahnemann Hospital Col. of San Francisco.	San Francisco, Cal.	1881	1884	J. W. Albertson, M.D., 111 Powell St., San Francisco, Cal.	6 mths., May 1, 1888.
2. Hahnemann Med. Col. and Hos. of Chicago.	Chicago, Ill.	1855	1859	R. Ludlam, M.D., 1823 Michigan Ave., Chicago, Ill.	22 weeks, Sept. 18, 1888.
3. Chicago Hom. Medical College.	Chicago, Ill.	1876	1876	J. S. Mitchell, M.D., 2954 Prairie Ave., Chicago, Ill.	22 weeks, Sept. 20, 1888.
4. Iowa State University Hom. Department.	Iowa City, Iowa.	1877	1877	A. C. Cowperthwaite, M.D., Iowa City, Iowa.	5 mths., Oct. 1, 1888.
5. Boston University School of Medicine.	Boston, Mass.	1869	1873	I. T. Talbot, M.D., 66 Marlborough St., Boston, Mass.	8 mths., Oct. 11, 1888.
6. University of Michigan; Hom. Department.	Ann Arbor, Mich.	1874	1875	H. L. Obetz, M.D., 139 First St., Detroit, Mich.	9 mths., Oct. 1, 1888.
7. Minnesota Hom. Med. College.	Minneapolis, Minn.	1886	1886	No Report.	
8. University of Minn. College of Hom. Med. & Sur.	Minneapolis, Minn.	1888	1888	No Report.	
9. Hom. Med. Col. of Missouri.	St. Louis, Mo.	1857	1858	S. B. Parsons, M.D., 2246 Washington Ave., St. Louis, Mo.	26 weeks, Sept. 15, 1888.
10. Kansas City Hom. Medical College.	Kansas City, Mo.	1888	1888	F. F. Casseday, M.D., 548 Main St., Kansas City, Mo.	6 mths., Oct. 1, 1888.
11. Hom. Med. Dep. of State Univ'ity of Nebraska.	Lincoln, Neb.	1884	1884	B. L. Paine, M.D., Lincoln, Neb.	
12. New York. Hom. Medical College and Hospital.	New York, N. Y.	1860	1860	T. F. Allen, M.D., 10 E. 36th St., New York.	6 mths., Oct. 4, 1888.
13. New York Med. Col. and Hosp. for Women.	New York, N. Y.	1863	1863	Phoebe J. B. Wait, M.D., 34th St., cor. North Ave., New York.	6 mths., Oct. 2, 1888.
14. Hom. Hospital College.	Cleveland, O.	1849	1849	J. C. Sanders, M.D., 608 Prospect St., Cleveland, O.	6 mths., Sept. 28, 1888.
15. Pulte Medical College.	Cincinnati, O.	1872	1872	J. D. Buck, M.D., 136 Garfield Place, Cincinnati, O.	21 weeks, Sept. 28, 1888.
16. Hahnemann Med. College of Philadelphia,	Philadelphia, Pa.	1848	1848	A. R. Thomas, M.D., 1733 Chestnut St., Philadelphia.	6 mths., Oct. 3, 1888.

IN THE UNITED STATES.

Course Required before Graduation.	No. of Students in Past Year.	No. of Graduates at last Commencem't.	No. of Alumni.	No. of Faculty.	No. of Professors.	No. of Lectures.	Estimated Value of College Property	Amount of Endowments.	Amount of Debt.	Amount of Income.	DELEGATES.
3	25	7	29	21	19	2	Rented.	None.	None.	$3000	S. Lilienthal, M.D., W. A. Dewey, M.D.
2		78	1492	17	14	3	$75,000	None.	None.		R. Ludlam, M.D., C. H. Vilas, M.D.
2 3 option'l	129	47	415	20	16	4	55,000	None.		7000 to 8000	J. S. Mitchell, M.D., R. N. Tooker, M.D.
2	36	14	111	4	4		8	tate.			A. C. Cowperthwaite, M.D. W. H. Dickinson, M.D.
3 4 option'l	110	35	449	38	12	19	100,000	30,000	30,000	9554	I. T. Talbot, M.D., C. Wesselhœft, M.D.
3	76	14	193	11	12		25,000	None.	None.	13,000 from State.	H. L. Obetz, M.D., H. R. Arndt, M.D.
2	44	18	452	11	11	2	20,000		8000	2500 to 3000	
2 and 3				14	11	3					F. F. Casseday, M.D., W. H. Jenney, M.D.
S	uspe	nded	for	la	ck	of	state a	ppropri	ations.		
3	138	48	1088	25	21	4	112,000	None.	25,000	11,949,19	T. F. Allen, M.D., J. W. Dowling, M.D.
3	42	9	235	21	16	5	Rented,	None.	None.		P. J. B. Wait, M.D., H. M. Dearborn, M.D.
2	92	30	1450	13	13	0	.	None.	None.	6000	J. C. Sanders, M.D., N. Schneider, M.D.
2	63	30	438	14	11	3	60,000	None.	None.	5000	J. D. Buck, M.D., C. D. Crank, M.D.
3	184	48	1717	23	9	14	130,000	None.	None.	16,000	A. R. Thomas, M.D., J. E. James, M.D,

GRADUATES OF HOMŒOPATHIC MEDICAL

By I. T. Talbot, M.D.,

HAHNEMANN HOSPITAL COLLEGE

Session commenced May 3, 1887. Session closed October 21, 1887. Number of Graduates, 7. Date of Com-

Name.	Residence.	Age.	Preceptor.
Barnes, Anna Harris	San Francisco, Cal	35	
Chaffer, John D	Garden Grove, Cal	41	
Dodge, Horace Tennent	Boston, Mass	35	
Fichtner, Gustav C	San Francisco, Cal	37	
Fouchy, Alphonse Denis,	San Francisco, Cal	29	
Mattner, Ernest Hermann	Adelaide, So. Australia	24	
Saltonstall, Florence N	San Francisco, Cal	24	

HAHNEMANN MEDICAL COLLEGE AND

Session commenced September 22, 1888. Session closed February 16, 1888. Num- Number of Graduates, 78. Date of

Adams, Georges Frances	New York		F. L. Lautway
Alexander, George Levi	Wisconsin		J. P. Webster
Arnold, Romus	Illinois		John B. Backus
Auringer, A. E	Wisconsin		E. H. Parker
Baker, Frank W	Indiana		
Ballinger, John P	New Jersey		H. Noah Martin
Berkman, Jesse H	New Jersey		G. T. Applegate
Bittinger, Frank D	Minnesota		Dr. G. A. Ross
Blackney, Samuel	Adelaide, So. Australia		Dr. Bollem
Blackwood, A. L	Illinois		Dr. M. M. McGillivary
Brant, H. W	Illinois		E. S. Burly
Brower, Willis A	New York		E. P. Thatcher
Carolus, W. B	Illinois		Dr. T. S. Kehr
Chapman, E. E. K	Michigan		Dr. W. R. Laughton
Chislett, H. R	Minnesota		Dr. C. G. Higbee
Collier, Amy Wilce	Illinois		Faculty and Dr. Hoyne
Cramer, W. E	Illinois		Dr. L. A. Macomber
Dennis, Mary A	Illinois		Dr. G. M. Dixon
Dick, Egdar A	Kansas		Dr. L. A. Ryder
Dresser, E. Dill	New York		Dr. F. L. Sautway
Ebersole, Joseph R	Illinois		Dr. S. S. Kehr
Gooding, Annie S. H	Michigan		Dr. A. R. Wheeler
Graham, John James	Indiana		Dr. Z. Hockett
Groves, Fred. E	Wisconsin		Dr. F. L. Sautway
Griggs, Elma	Pennsylvania		Dr. E. J. Beale
Gorb, A. E			Dr. Gorb
Hocker, W. Henri	New York		Faculty
Horby, Anna C	Illinois		Dr. E. S. Burly
Hennessy, Margarett E	New York		Dr. S. H. Ward
Hill, O. F	Iowa		Dr. Carlton V. Wilder

COLLEGES—SESSION OF 1887–88.

BOSTON, MASS.

OF SAN FRANCISCO, CAL.

weeks, 22. Number of Matriculates in attendance during session, 25. Number of mencement, November 9, 1887.

Time of Study.	Number of Courses Attended, and Where.
Years.	
3	3 courses at Hahnemann Hospital College, San Francisco.
3	3 courses at Hahnemann Hospital College, San Francisco.
3	3 courses at Hahnemann Hospital College, San Francisco.
3	3 courses at Hahnemann Hospital College, San Francisco.
3½	2½ courses at Coll. of Phys. and Surg., Bos. 1 course at Hahn. Hos. Coll., S. F.
4	1 course at Cal. Eclectic College, and 3 at Hahn. Hos. College, San Francisco.
3	3 courses at Hahnemann Hospital College, San Francisco.

HOSPITAL OF CHICAGO, ILL.

ber of weeks, 21. Number of Matriculates in attendance during Session, 196 Commencement, February 16, 1888.

3½	2 courses in Hahnemann Medical College of Chicago.
3½	2 courses in Hahnemann Medical College of Chicago.
3	2 courses in Hahnemann Medical College of Chicago.
3	2 courses in Hahnemann Medical College of Chicago.
.....	.....
3¾	3 courses in Hahn. Med. Coll. of Phila., and 1 in Hahn. Med. Coll., Chicago.
3½	2 courses in Hahnemann Medical College of Chicago.
3¾	2 courses in Hahnemann Medical College of Chicago.
10	2 courses in Hahnemann Medical College of Chicago.
3½	2 courses in Hahnemann Medical College of Chicago.
4	3 courses in Hahnemann Medical College of Chicago.
3½	2 courses in Hahnemann Medical College of Chicago.
.....	2 courses in Hahnemann Medical College of Chicago.
4	2 courses in Hahnemann Medical College of Chicago.
3½	2 courses in Hahnemann Medical College of Chicago.
.....	4 courses in Hahnemann Medical College of Chicago.
5	2 courses at State Univ. of Neb., Med. Dep't, and 1 at Hahn. Med. Coll. of Chicago.
3	.....
3	2 courses in Hahnemann Medical College of Chicago.
3	2 courses in Hahnemann Medical College of Chicago.
3	2 courses in Hahnemann Medical College of Chicago.
5	2 courses in Univ. of Michigan, and 1 in Hahn. Medical College of Chicago.
3	2 courses in Hahnemann Medical College of Chicago.
3	2 courses in Hannemann Medical College of Chicago.
3½	2 courses in Cleveland Hom. Med. Coll., and 1 in Hahn. Med. Coll., Chicago.
3	2 courses in Hahnemann Medical College of Chicago.
.....	2 courses in Med. Dep't., Niagara Univ., and 1 in Hahn. Med. Coll., Chicago.
3	3 courses in Hahnemann Medical College of Chicago.
4	1 course in Women's Med. Coll. of N. Y., and 2 in Hahn. Med. College of Chicago.
4½	2 courses in Hahnemann Medical College of Chicago.

HAHNEMANN MEDICAL COLLEGE AND

Name.	Residence.	Age.	Preceptor.
Holland, Jos. H.	Missouri		Dr. J. H. Emmons
Howe, Melow F	Iowa		Dr. W. A. Hubbard
Jordan, J. Eugene	Illinois		Dr. C. H. Hallowell
Keeler, C. B.	Connecticut		Dr. C. H. Boardman
Kendall, Sarah A	Massachusetts		Dr. Gertrude E. Heath
Krudop, D. T	Minnesota		Dr. W. H. Leonard
Krudop, Mrs. D. T.	Minnesota		Dr. Lora Blackman, N. Y.
Lanning, W. S.	Iowa		Dr. W. H. King
Leonard, E. J	Illinois		Dr. A. E. Small
Lyon, H. N.	Michigan		Dr. H. C. Brigham
Olsen, Valdimar	Kansas		Dr. F. E. Raines
Patterson, H. S.	Iowa		Dr. S. A. Bass
Pearson, A. W	Iowa		Dr. A. H. Pearson
Pursell, Joseph P	Pennsylvania		Dr. Willets
Pike, Rhoda	Maine		Dr. W. S. Howe
Place, J. F.	Rhode Island		Dr. Geo. B. Peck
Pulford, Charles H.	Connecticut		Dr. Pulford
Rhodes, Robert Rinks	Indiana		Dr. J. R. Lang
Russell, G. A.	Wisconsin		Dr. F. L. Carr
Scott, F. J	Illinois		Dr. E. D. Scott
Shepard, W. Y.	Illinois		Dr. W. A. Shepard
Shutterly, Eugene E.	Illinois		Faculty
Siegfried, J. P	Ohio		Dr. Wm. Gaylord
Slaughter, L. N.	Delaware		Dr. J. M. Smith
Smith, George R	Vermont		Dr. F. E. Steele
Steele, Charles F	Wisconsin		E. J. Gibson
Stewart, Estelle R.	Kansas		Dr. Allard
Stewart, W. B.	Indiana		Dr. J. H. Ford
Stiles, V. W.	Illinois		Dr. W. H. Stilis
Taylor, N. Beatrice	New York		Dr. M. A. Adams
Tedman, L. J	Michigan		Dr. C. C. Shermer
Thacker, W. Henry	New York		Dr. E. P. Shocker
Thompson, Ed. K.	Michigan		Dr. C. L. Thompson
Thompson, A. H.	Ohio		Dr. W. B. Carpenter
Turbitt, Samuel O.	Michigan		Dr. C. Lards
Tuttle, E. R.	Wisconsin		Dr. F. C. Cann
Van Doren, W. H.	Nebraska		Dr. Louis N. Howard
Van Horn, Mary L.	Illinois		Dr. A. E. Small
Vary, W. H.	Illinois		Dr. H. A. Tarbell
Ward, W. H.	Illinois		Dr. Ward
Waters, F. R.	Illinois		Dr. Hollingsworth
Weeks, G. H. P	Illinois		Dr. Mary Weeks, Burnett.
Woodburn, Wm	Kansas		Faculty
Whittier, Gen. N.	Illinois		Dr. B. O. Wheeler
Yarnell, Joseph E.	Ohio		Dr. D. M. Keith
Yates, C. J.	Nebraska		Dr. W. M. Medcalf
Young, D. F.	New York		Dr.———
Young, Julius	Illinois		F. M. Nedder

HOSPITAL OF CHICAGO—CONTINUED.

Time of Study.	Number of Courses Attended, and Where.
Years.	
4	2 courses in Hahnemann Medical College of Chicago.
3½	2 courses in Hahnemann Medical College of Chicago.
10	3 courses in Hahnemann Medical College of Chicago.
3½	2 courses in Hahnemann Medical College of Chicago.
3½	2 courses in Hahnemann Medical College of Chicago.
4	2 courses in Hahn. Med. Coll. of Chicago, and Minneapolis Med. College.
3	3 courses in Hahnemann Medical College of Chicago.
.....	2 courses in Hahnemann Medical College of Chicago.
4	3 courses in Hahnemann Medical College of Chicago.
5	2 courses in Hahnemann Medical College of Chicago.
3¼	2 courses in Hahnemann Medical College of Chicago.
3⅛	3 courses in Hahnemann Medical College of Chicago.
3 5/12	2 courses in Hahnemann Medical College of Chicago.
3¼	2 courses in Hahnemann Medical College of Chicago.
3⅛	2 courses in Hahnemann Medical College of Chicago.
3 5/12	1 course in Coll. of Phys. and Surg., of N. Y., and 1 at Hahn. Med. Coll. of Chicago.
7	2 courses in N. Y. Hom. Coll., and 1 at Hahn. Medical College of Chicago.
3	2 courses in Hahnemann Medical College of Chicago.
3⅛	2 courses in Hahnemann Medical College of Chicago.
3	2 courses in Hahnemann Medical College of Chicago.
10	2 courses in Hahnemann Medical College of Chicago.
3	2 courses in Hahnemann Medical College of Chicago.
3⅛	2 courses in Hahnemann Medical College of Chicago.
4	2 courses in Hahnemann Medical College of Chicago.
3	2 courses in Hahnemann Medical College of Chicago.
3	2 courses in Hahnemann Medical College of Chicago.
4	3 courses in Hahnemann Medical College of Chicago.
8	2 courses in Med. Dep't of Indianapolis, Eclectic, and 1 in Hahn. Med. Coll. of Chi.
3	2 courses in Hahnemann Medical College of Chicago.
3	3 courses in Hahnemann Medical College of Chicago.
3½	3 courses in Hahnemann Medical College of Chicago.
.....	.....
3 1/12	2 courses in Hahnemann Medical College of Chicago.
3⅛	2 courses in Hahnemann Medical College of Chicago.
9	2 courses in Hahnemann Medical College of Chicago.
3	2 courses in Hahnemann Medical College of Chicago.
3½	2 courses in Hahnemann Medical College of Chicago.
10	3 courses in Hahnemann Medical College of Chicago.
3	1 course in Univ. of Iowa, and 1 in Hahnemann Medical College of Chicago.
4	3 courses in Hahnemann Medical College of Chicago.
3½	2 courses in Hahnemann Medical College of Chicago.
4	2 courses in Hahn. Med. College of Chicago, and 1 in Univ. of Michigan.
3½	2 courses in Hahnemann Medical College of Chicago.
4	3 courses in Hahnemann Medical College of Chicago.
6	2 courses in Hahnemann Medical College of Chicago.
4	2 courses in Hahnemann Medical College of Chicago.
3	1 course in New York College and 1 in Hahn. Medical College, of Chicago.
3	2 courses in Hahnemann Medical College of Chicago.

CHICAGO HOMŒOPATHIC

Session commenced September 20th, 1887. Session closed February 21st, 1888. Number of Graduates, 47. Date of

Name.	Residence.	Age.	Preceptor.
Baker, G	Hopkins, Mich	24	E. H. Ryno, M.D
Bolles, C. H	Spring Valley, Minn	24	C. H. Wagner, M.D
Buskirk, I. C	Hopkins, Mich	35	E. H. Ryno, M.D
Butterfield, J. C	Parkman, Me	49	J. I. Wedgewood, M.D
Carscadden, R	York, Neb	47	Practitioner
Coleman, E. B	Nantucket, Mass	26	B. F. Pitman, M.D
Conner, C. E	Los Angeles, Cal	23	J. R. Kippax, M.D
Cox, J. T	Rochester, N. Y	22	J. W. Buell, M.D
Dale, H. B., Jr	Oshkosh, Wis	23	H. B. Dale, M.D
Davis, W. J	Battle Creek, Mich	26	J. B. Davis, M.D
Dewey, J. R	Chicago, Ill	56	C. M. Beebe, M.D
Eaton, J. S	Lincoln, Neb	22	B. L. Paine, M.D
Everett, F	Hooperville, Utah Ter	27	H. M. Hobart, M.D
Fritts, L. C	Chicago, Ill	34	H. A. Dittmer, M.D
Gleason, G. W	Pipestone, Minn	36	J. S. Mitchell, M.D
Hanchett, J. C	Kaneville, Ill	23	W. H. Hanchett, M.D
Harris, J. W	Detroit, Mich	24	T. H. Tyler, M.D
Harvey A. K. P	Lewiston, Me	32	H. C. Bradford, M.D
Hewins, S. P	Geneva, Ohio	27	F. G. Barnes, M.D
Howard, G. P	Manhattan, Kans	25	S. D. Ross, M.D
Irwin, T. A	Pardoe, Pa	45	J. M. Douds, M.D
Keegan, W. A	Rochester, N. Y	26	I. C. White, M.D
Koier, L. C	Chicago, Ill	23	C. M. Koier, M.D
Kuntz, W. H	Slatington, Pa	40	H. G. Weist, M.D M. J. Holben, M.D
Low, J. H	Owenton, Ky	22	W. T. Reese, M.D
Macdonald, W. H	Lake Geneva, Wis	21	J. A. Macdonald, M.D
Miles, J. H	Elkader, Iowa	33	H. A. Bass, M.D
Miner, H. S	Hamilton, N.Y	31	G. L. Gifford, M.D
Newberry, F. J	Enfield, Iowa	29	F. H. Howard, M.D
Reininger, E. E	Chicago, Ill	33	I. R. Grow, M.D
Richman, W. C	Muscatine, Iowa	27	L. H. Maloney, M.D
Rinkenberger, A. C	Chicago, Ill	20	J. S. Mitchell, M.D
Roberts, T. E	Boston, Mass	23	O. S. Sanders, M.D
Rogers, F. W	Norwalk, Ohio	24	W. E. Gill, M.D
Scholer, E. C	Chicago, Ill	27	J. R. Kippax, M.D
Smith, E. L	Bellefontaine, Ohio	23	J. H. Wilson, M.D
Spencer, W. F	Henry, Ill	24	H. H. Chase, M.D
Sweet, A. B	Byron, Wis	40	W. H. Wilson, M.D
Thompson, J. J	Chicago, Wis. (?)	31	W. R. Riley, M.D
Tiffany, D. S	Loran, Ill	27	S. H. Arnrand, M.D
Titzel, W. R	Greenville, Pa	22	J. H. Martin, M.D
Treat, C. R., Jr	Sharon, Wis	22	C. R. Treat, M.D
Wales, A. H	Lanark, Ill	21	H. W. Wales, M.D
White, W. S	Chicago, Ill	23	C. M. Beebe, M.D
Winans, T. H	Osceola, Mo	34	W. E. Bell, M.D
Worth, R. F	Belleville, Canada	23	E. M. Cook, M.D
Worthen, L. J	Chicago, Ill	39	H. M. Fenner, M.D W. A. Little, M.D.

MEDICAL COLLEGE.

Number of weeks, 22. Number of Matriculates in attendance during Session, 129. Commencement, February 21st, 1888.

Time of Study.	Number of Courses Attended, and Where.
Years.	
3	2 courses in Hahn. Med. Col., Chicago; 1 in Chicago Hom. Med. Col.
4	3 courses in Chicago Hom. Med. Col.
3	1 course in Hahn. Med. Col., Chicago; 1 in Chicago Hom. Med. Col.
6	2 courses in Eclectic Med. Col., Maine; 1 in Chicago Hom. Med. Col.
5	2 courses in Rush Med. Col., Chicago; 1 in Chicago Hom. Med. Col.
4½	2 courses in Chicago Hom Med. Col.
3	1 course in Hahn. Med. Col., Chicago; 1 in Chicago Hom. Med. College.
3	2 courses in Chicago Hom. Med. College.
4½	2 courses in Rush Med. Col., Chicago; 1 in Chicago Hom. Med. Col.
3	1 course in Col. Phys. & Surg., Chicago; 1 in Chicago Hom. Med. College.
3	3 courses in Chicago Hom. Med. College.
4	3 courses in Univ. of Nebraska; 1 in Chicago Hom. Med. College.
3	2 courses in Chicago Hom. Med. College.
4	1 course in Hahn. Med. Col., Chicago; 1 in Chicago Hom. Med. College.
3	2 courses in Chicago Hom. Med. College.
3	2 courses in Chicago Hom. Med. College.
3	2 courses in Chicago Hom. Med. College.
6	3 courses in Eclectic Med. Col., Maine; 1 in Chicago Hom. Med. College.
4	2 courses in Chicago Hom. Med. College.
4	2 courses in Chicago Hom. Med. College.
5	1 course in Jefferson College, Penna.; 2 in Chicago Hom. Med. College.
5	2 courses in Chicago Hom. Med. College.
3	3 courses in Chicago Hom. Med. College.
3	1 course and 1 Spring course in Hahn. Med. Col., Pa.; 1 in C. Hom. M. C.
3	2 courses in Chicago Hom. Med. Col.
3	2 courses in Chicago Hom. Med. College.
3	2 courses in Hahn. Med. Col., Chicago; 1 in Chicago Hom. Med. College.
3	2 courses in Chicago Hom. Med. College.
3	1 course in Hahn. Med. Col., Chicago; 1 in Chicago Hom. Med. College.
3	3 courses in Chicago Hom. Med. College.
3½	2 courses in Chicago Hom. Med. College.
4	3 courses in Chicago Hom. Med. College.*
5	2 courses in Chicago Hom. Med. College.
3	2 courses in University of Mich.; 1 in Chicago Hom. Med. College.
3	2 courses in Chicago Hom. Med. College.
3	2 courses in Chicago Hom. Med. College.
3	2 courses in Chicago Hom. Med. College.
3	1 course in Hahn. Med. Col., Chicago; 1 in Chicago Hom. Med. College.
3	2 courses in Chicago Hom. Med. College.
3	2 courses in Chicago Hom. Med. College.
3	2 courses in Chicago Hom. Med. College.
3	2 courses in Chicago Hom. Med. College.
4	3 courses in Chicago Hom. Med. College.
3	3 courses in Chicago Hom. Med. College.
3	2 courses in Chicago Hom. Med. College.
3	2 courses in Chicago Hom. Med. College.
6	2 courses in Chicago Hom. Med. College.

* Diploma withheld for 1 year, applicant being under 21 years of age.

HOMŒOPATHIC MEDICAL DEPARTMENT

Session commenced October 6th, 1887. Session closed March 6th, 1888. Number ber of Graduates, 13. Date of

Name.	Residence.	Age.	Preceptor.
Bennett, Theodocia	Riceville, Iowa	23	C. F. Bennett, M.D.
Boynton, F. H.	Mt. Pleasant, Iowa	22	J. H. Drake, M.D.
Carns, H.	Iowa City, Iowa	27	J. G. Gilchrist, M.D.
Glasier, J. J.	Richland Centre, Wis.	22	G. R. Mitchell, M.D.
Greene, E. P.	Sibley, Iowa	28	B. A. Wilder, M.D.
Krogstad, H.	St. Paul, Minn	29	E. Walther, M.D.
Lankton, F. M.	Omaha, Nebraska	35	A. Burroughs, M.D.
McChesney, M. J.	Troy, New York	32	H. A. McChesney, M.D.
Miller, J. P.	Iowa City, Iowa	51	A. C. Cowperthwaite, M.D.
Nelson, J. S.	Bode, Iowa	27	J. Vought, M.D.
Nietman, L. F.	Clinton, Iowa	39	
Parker, J. W.	Montrose, Iowa	21	R. M. Parker, M.D.
Suffa, G. A.	Greenville, R. I.	29	C. H. Cogswell, M.D.

BOSTON UNIVERSITY

Session commenced October 13th, 1887. Session closed June 6th, 1888. Number ber of Graduates, 35. Date of

Armstrong, Mary Marg.	Port Byron, New York	23	W. M. Gwynne, M.D.
Babbitt, Henry Bradford.	North Dighton, Mass.	22	W. M. Babbett, M.D.
Barrus, Clara	Port Byron, New York	23	W. M. Gwynne, M.D.
Biscoe, Ellis Franklin	Boston, Mass.	39	B. U. School of Medicine.
Bothfeld, Jas. Francis, C.B.	Boston, Mass.	23	B. U. School of Medicine.
Butterfield, Emma Roby	Lowell, Mass.	28	F. A. Warren, M.D.
Carry, Wm. Hammett	Newport, Rhode Island	23	B. U. School of Medicine.
Chapin, Francis Colburn	Somerville, Mass.	25	B. U. School of Medicine.
Chipman, Anna Mary	Cambridge, Mass.	31	B. U. School of Medicine.
Clark, Frederick Lincoln	Providence, R. I.	23	B. U. School of Medicine.
Clarke, Mort'r Hall, A.B.	New Bedford, Mass.	27	Henry B. Clarke, M.D.
Cooke, Wm. Harvey, A.B.	Bethlehem, Penna.	23	J. W. Detwiler, M.D.
Crowell, Hannah Hall	E. Dennis, Mass.	30	J. S. Shaw, M.D.
Dike, John, A.B.	Bath, Maine	31	N. W. Emerson, M.D.
Elliott, Fred. Wm., A.B.	Boston, Mass.	32	A. C. Alexander, M.D.
Ford, Nehemiah Butler, A.B.	Boston, Mass.	24	I. T. Talbot, M.D.
Galloway, Wm. Lincoln.	St. Louis, Missouri	28	B. U. School of Medicine.
Gannon, Annie Margaret	Boston, Mass.	24	B. U. School of Medicine.
Jenney, Arthur Barker	Boston, Mass.	34	J. Heber Smith, M.D.
Johnson, Hen. Warren, A.B.	Woburn, Mass	29	B. U. School of Medicine.
Kaiser, Rudolf Carl	Boston, Mass.	29	B. U. School of Medicine.
Keith, Ellen Louisa	Grafton, Mass.	37	M. D. M. Matthews, M.D.
Lawrence, Clara Bell	Lawrence, Mass.	28	B. U. School of Medicine.
Patch, Frank Wallace	Waltham, Mass.	26	W. O. Ruggles, M.D.
Porter, Charles Ilsley	Weymouth, Mass.	22	B. U. School of Medicine.
St. John, Edward Thos.	Barbadoes, West Indies	26	B. U. School of Medicine.
Searle, George James	Blackstone, Mass.	27	B. U. School of Medicine.
Sears, Eloise Augusta	Malden, Mass.	34	B. U. School of Medicine.

STATE UNIVERSITY OF IOWA.

of weeks, 22. Number of Matriculates in attendance during Session, 36. Num-
Commencement March 6th, 1888.

Time of Study.	Number of Courses Attended, and Where.
Years.	
3	2 courses in State University of Iowa.
3	2 courses in State University of Iowa.
3	2 courses in State University of Iowa.
3	2 courses in State University of Iowa.
3	2 courses in State University of Iowa.
3	2 courses in State University of Iowa.
4	2 courses in State University of Iowa.
3	2 courses in State University of Iowa.
3	2 courses in State University of Iowa.
3	2 courses in State University of Iowa.
5	1 course in State University of Iowa, and 2 in Chicago Hom. Med. College.
3	2 courses in State University of Iowa.
3	2 courses in State University of Iowa.

SCHOOL OF MEDICINE.

of weeks, 34. Number of Matriculates in attendance during Session, 110. Num-
Commencement, June 6th, 1888.

3	3 courses in Boston University School of Medicine.
4	4 courses in Boston University School of Medicine.
3	3 courses in Boston University School of Medicine.
3	3 courses in Boston University School of Medicine.
4	4 courses in Boston University School of Medicine.
3	3 courses in Boston University School of Medicine.
3	3 courses in Boston University School of Medicine.
5	5 courses in Boston University School of Medicine.
3	3 courses in Boston University School of Medicine.
3	3 courses in Boston University School of Medicine.
3	3 courses in Boston University School of Medicine.
3	3 courses in Boston University School of Medicine.
5	5 courses in Boston University School of Medicine.
3	3 courses in Boston University School of Medicine.
3	3 courses in Boston University School of Medicine.
3	3 courses in Boston University School of Medicine.
3	3 courses in Boston University School of Medicine.
4	4 courses in Boston University School of Medicine.
3	3 courses in Boston University School of Medicine.
3	3 courses in Boston University School of Medicine.
3	3 courses in Boston University School of Medicine.
3	3 courses in Boston University School of Medicine.
5	4 courses in Boston University School of Medicine.
3	3 courses in Boston University School of Medicine.
4	4 courses in Boston University School of Medicine.
3	3 courses in Boston University School of Medicine.
4	3 courses in Boston University School of Medicine.
5	3 courses in Boston University School of Medicine.

BOSTON UNIVERSITY

Name.	Residence.	Age.	Preceptor.
Sheldon, Martha A., A.B.	Excelsior, Minn	28	B. U. School of Medicine
Shepard, Jessie	Buffalo, New York	27	B. U. School of Medicine
Smith, Virginia Tenney	Boston, Mass	27	B. U. School of Medicine
Sumner, Arthur Foster	Thomaston, Me	23	A. F. Piper, M.D.
Thomas, Charles Holt	Cambridge, Mass	37	N. W. Emerson, M.D.
Worcester, Jno. Fonerden	Bridgewater, Mass	24	B. U. School of Medicine
Wright, Edw. Olin, A.B.	Woburn, Mass	27	B. U. School of Medicine

HOMŒOPATHIC DEPARTMENT

Session commenced October 1st, 1887. Session closed July 1st, 1888. Number of of Graduates, 14. Date of

Bailey, George Lake	Morice, Mich	36	J. S. Wheelock
Baldwin, Artemisia, M.D.	Huntsville, Texas	26	Practitioner
Campbell, John Stuart	North Branch, Mich	28	G. W. Campbell
Kishpaugh, Geo. Willard	Clinton, Mich	29	Faculty
Lee, Sarah Idella	Rochester, N. Y	30	J. M. Lee
Lyons, Matilda J	Cadez, Ohio	40	Rachel M. Watson
Messill, Asabella	Astoria, Ill	30	Faculty
Milner, Sam'l G., A.M	Grand Rapids, Mich	38	H. R. Arndt, M.D.
Œleman, Louise Eliza	Detroit, Mich	32	Phil. Porter
Shaw, Earl Fuller	Lowell, Mich	23	A. B. Grant
Snyder, M. B., A.B.	Slippery Rock, Pa	28	Benj. Pearson
Snyder, Sue M	Slippery Rock, Pa	26	J. S. Rankin
Taylor, Rodney C	St. Louis, Mo	24	Faculty
Wheelock, Zilpha R	Bancroft, Mich	32	J. W. Wheelock

*UNIVERSITY OF MICHIGAN

Session commenced October 1st, 1886. Session closed June 28th, 1887. Number of Graduates, 12. Date of

Arndt, Geo. D	Ann Arbor, Mich	23	Hugo R. Arndt
Brooks, Wm. F	Parma, Mich	24	O. S. Hartson
Cook, Mary A	Norwalk, Ohio	34	Olive L. Eddy
Darby, Edward A	Hastings, Neb	32	A. R. Van Sickle
Dearborn, Ella K	Saginaw, Mich	30	L. A. Melze
Hendershott, Lizzie A	Irving, Mich	27	Faculty
Lawrence, Jonn H	Leslie, Mich	24	Faculty
Portee, Hutoka L	Black River Falls, Wis	38	Faculty
Ruggles, Eugene W	Hartford, Mich	25	Faculty
Sanborn, Harriet S	Ann Arbor, Mich	26	Faculty
Sinclair, Duncan J	St. Thomas, Ont	23	L. Luton
Thomson, Mary Ella, A.B.	Lapeer, Mich	25	Faculty

* Published because of its unavoidable omission from last year's TRANSACTIONS.

SCHOOL OF MEDICINE—CONTINUED.

Time of Study.	Number of Courses Attended, and Where.
Years.	
3	3 courses in Boston University School of Medicine.
3	3 courses in Boston University School of Medicine.
4	4 courses in Boston University School of Medicine.
3	3 courses in Boston University School of Medicine.
3	3 courses in Boston University School of Medicine.
3	3 courses in Boston University School of Medicine.
3	3 courses in Boston University School of Medicine.

UNIVERSITY OF MICHIGAN.

weeks, 36. Number of Matriculates in attendance during Session, 62. Number Commencement, July 1st, 1888.

3	3 courses in Hom. Department University of Michigan.
4	2 courses in Chicago Hom. Med. College; 1 in Hom. Dep. Univ. of Mich.
4	4 courses in Hom. Department University of Michigan.
4	2 courses in Dept. of Med. and Surg. Univ. of Mich.; 2 in H. D. U. of M.
9	3 courses in Hom. Department University of Michigan.
6	2 courses in Univ. of Penna.; 1 in Hom. Department Univ. of Michigan.
3	3 courses in University of Michigan Hom. Department.
7	2 courses in University of Michigan Hom. Department.
3	2 courses in University of Michigan Hom. Department.
3	3 courses in University of Michigan Hom. Department.
3	2 courses in University of Michigan Hom. Department.
3	2 courses in University of Michigan Hom. Department.
3	3 courses in University of Michigan Hom. Department.
4	2 courses in University of Michigan Hom. Department.

HOMŒOPATHIC DEPARTMENT.

of weeks, 36. Number of Matriculates in attendance during Session, 76. Number Commencement, June 28th, 1887.

4	3 courses in Michigan University Hom. Department.
4	3 courses in Michigan University Hom. Department.
4	3 courses in Michigan University Hom. Department.
4	3 courses in Michigan University Hom. Department.
4	3 courses in Michigan University Hom. Department.
3	3 courses in Michigan University Hom. Department.
4	3 courses in Michigan University Hom. Department.
5	3 courses in Michigan University Hom. Department.
4	3 courses in Michigan University Hom. Department.
5	4 courses in Michigan University Hom. Department.
4	3 courses in Michigan University Hom. Department.
4	3 courses in Michigan University Hom. Department.

HOMŒOPATHIC MEDICAL

Session commenced September 15th, 1887. Session closed March 7th, 1888. Number of Graduates, 18. Date of

Name.	Residence.	Age.	Preceptor.
Boyce, A. L.	Auburn N. Y.	21	C. W. Boyce, M.D.
DeLoureal, L. A.	St. Martinsville, La.	21	C. R. Mayer, M.D.
Ellis, W. B.	Hatton, Mo.	41	W. L. Reid, M.D.
Gill, J. A.	Purdy, Mo.	33	E. P. Bean, M.D.
Griffith, F. L.	Kirksville, Mo.	28	N. G. Strickland, M.D.
Grundmann, Wm.	St. Louis, Mo.	28	S. B. Parsons, M.D.
Harris, Wm. T.	Kealeaqua, Iowa	46	Practitioner
Hicks, R. A.	Trenton, Tenn.	52	Practitioner
Keaney, W. M.	DeSoto, Mo.	21	James Keaney, M.D.
Knox, Mrs. Lucy R. P.	St. Louis, Mo.	26	F. T. Knox, M.D.
Lawrence, J. M.	Houston, Texas	50	J. G. Ellis, M.D.
Leggett, Mrs. J. S.	Watertown, New York	41	Wm. A. Hawley, M.D.
McDonald, Overton F.	Toronto, Canada	23	John Hall, M.D.
Meyer, Henry	Hermann, Mo.	21	College
Myers, A. P.	Whistler, Ala.	28	E. H. P. Judd, M.D.
Ottofy, L. M.	Webster, Mo.	23	H. J. Dionysius, M.D.
Sargent, Mary U	St. Louis, Mo.	22	Fenora Sargent, M.D.
Voss, L. C.	Springfield, Ind.	24	H. C. Baker, M.D.

NEW YORK HOMŒOPATHIC MEDICAL

Session commenced October 4th, 1887. Session closed March 26th, 1888. Num Number of Graduates, 48. Date of

Allen, Jonathan Hill	Montville, Conn.	29	Geo. S. Morgan, M.D.
Allen, Wilfred Cornell	Brooklyn, N. Y.	21	College
Baker, Allen Eugene	Auburn, N. Y.	25	C. E. Swift, M.D.
Birdsall, Wm. Gedney	Greenpoint, L. I.	32	S. T. Birdsall, M.D.
Campbell, John Bright	Brooklyn, N. Y.	23	Alice B. Campbell, M.D.
Clausen, Bernard	Hoboken, N. J.	23	D. McClellan, M.D.
Cummins, Frank Markoe	New York City, N. Y.	26	E. W. Seward, M.D.
Elliot, Amos H.	New York City, N. Y.	47	H. W. Garrison, M.D.
Fletcher, Zachary Peck	New York City, N. Y.	25	C. M. Baker, M.D.
Foster, Alonzo Barton, M.D.	Waterford, Ont., Canada	.....	Dr. Emerich
Gwynn, Chas. Andrews	Throopsville, N. Y.	21	Wm. M. Gwynn, M.D.
Hamlin, Fred. W., A.B.	New York City, N. Y.	25	L. L. Danforth, M.D.
Hatch, Elmer Martin	New York City, N Y.	25	J. W. Davies, M.D.
Haviland, Willis Henry	Glens Falls, N. Y.	23	S. T. Birdsall, M.D.
Hinman, Richard Edw'd	Atlanta, Ga.	.....	George Acker, M.D.
Hoag, Alva Albert	Bridgeport, Conn.	28	.....
Holly, Alexander P. B., L. C. Univer.	Port au Prince, Hayti	22	Pr'f. W. W. Blackman, M.D.
Jackson, John Charles	New York City, N. Y.	23	O. S. Hardy Jordan, M.D.
Jenett, Howard Clifton, A.B.	Haverhill, Mass.	29½	Chas. F. Sherman, M.D.
Jones, Herbert Samuel	South Sudbury, Mass.	36	Bruce S. Keator, M.D.
Kastendrick, Julius T. W.	Brooklyn, N. Y.	23	J. Kastendrick
Kline, Andrew K.	North Branch, N. J.	28	Arthur Kenney, M.D.
Landauer, Simon C.	Medina, N. Y.	22½	R. S. Bishop, M.D.

COLLEGE OF MISSOURI.

Number of weeks, 25. Number of Matriculates in attendance during Session, 46. Commencement, March 15th, 1888.

Time of Study.	Number of Courses Attended, and Where.
Years.	
3	2 courses in Hom. Medical College of Missouri.
3	2 courses in Hom. Medical College of Missouri.
14	2 courses in Hom. Medical College of Missouri.
2	2 courses in Hom. Medical College of Missouri.
3	2 courses in Hom. Medical College of Missouri.
4	2 courses in Hom. Medical College of Missouri.
23	1 course in Keokuk, Iowa, and 1 in Hom. Medical College of Missouri.
31	Graduate of Macon, Ga., and Eclectic School, Cincinnati.
3	2 courses in Hom. Medical College of Missouri.
3	2 courses in Hom. Medical College of Missouri.
3	Toulane University.
3	2 courses in Hom. Medical College of Missouri.
3	Graduate of Cleveland, Ohio.
3	2 courses in Hom. Medical College of Missouri.
3	2 courses in Hom. Medical College of Missouri.
3	2 courses in Hom. Medical College of Missouri.
4	2 courses in Hom. Medical College of Missouri.
3	2 courses in Hom. Medical College of Missouri.

COLLEGE AND HOSPITAL.

ber of weeks, 23. Number of Matriculates in attendance during Session, 138. Commencement, April 13th, 1888.

3½	2 courses in New York Hom. Medical College.
3	3 courses in New York Hom. Medical College.
3	3 courses in New York Hom. Medical College.
4	4 courses in New York Hom. Medical College.
3	3 courses in New York Hom. Medical College.
3	3 courses in New York Hom. Medical College.
4	3 courses in New York Hom. Medical College.
3	2 courses in New York Hom. Medical College.
3	3 courses in New York Hom. Medical College.
4	4 courses; 1st and 2d in Trinity Medical School.
3	3 courses in New York Hom. Medical College.
3	3 courses in New York Hom. Medical College.
5	4 courses in New York Hom. Medical College.
4	3 courses in New York Hom. Medical College.
4	1 course in Nat. Med. Coll., Washington, D.C., and 3 in New York Hom. Med. Coll.
3	3 courses in New York Hom. Medical College.
3	3 courses in New York Hom. Medical College.
3	3 courses in New York Hom. Medical College.
3	3 courses in New York Hom. Medical College.
3	3 courses in New York Hom. Medical College.
4	3 courses in New York Hom. Medical College.
4	3 courses in New York Hom. Medical College.
4	3 courses in New York Hom. Medical College.

NEW YORK HOMŒOPATHIC MEDICAL

Name.	Residence.	Age.	Preceptor.
Mandeville, Frederick A.	Newark, N. J.	24	Dr. Mandeville, Newark
McGleary, Geo. Harvey	Merkle, Pa.	25	E. W. Dean, M.D.
McGraw, De Witt Hiram, A. B.	Binghamton, N. Y.	27	E. E. Snyder, M.D.
McIntosh, Sherwood Day.	Auburn, N. Y.	28	Dr. Congdon
Miller, Harry T.	Springfield, Ohio	21½	J. M. Miller, M.D.
Moriarty, Pierre Colon	Brooklyn, N. Y.	22	H. J. Pierron, M.D.
Mowbray, J. Lincoln	Allendale, N. J.	21	Martin Deschere, M.D.
Parker, Edwin Kenney	Littleton, N. H.	24	T. E. Sanger, M.D.
Platt, Clarence Nathaniel, A. B.	New Haven, Conn.	24	
Queen, Louis Apgar, D.D.S.	New York City	29	Eugene H. Porter, M.D.
Rathbun, Greenville A.	Franklin, N. Y.	28	
Robinson, Wilhelmus Bogart	Haverstraw, N. Y.	26	
Sawyer, Willis Herbert	Antrim, N. H.	25	Morris Christie, M.D.
Smith, Charles William	Brooklyn, N. Y.	30	E. Hasbrouck, M.D.
Smith, Edw. Sylvester	New Haven, Conn.	25	
Sweet, Robert Vaughn	Port Byron, N. Y.	26	
Van Derwerker, Hiram W	Glens Falls, N. Y.	30	Henry Coffin, M.D.
Ver Hooy, Charles	Rutherford, N. J.	23	H. H. Hollister, M.D.
Wakeley, William Abner	Levana, N. Y.	25	J. P. Truman, M.D.
Walters, John B., M.D.	Brooklyn, N. Y.	22	C. A. Walters, M.D.
Whitley, Edgar Washburne	New York City, N. Y.	21	A. H. Birdsall, M.D.
Wiggins, Theo. Crawford	Brooklyn, N. Y.	24	
Winans, Howard E.	Caldwell, N. J.	24	H. D. Winans, M.D.
Woodruff, Joseph Miller, A.M.	Newark, N. J.	28	F. B. Mandeville, M.D.

NEW YORK MEDICAL COLLEGE

Session commenced October 24th, 1887. Session closed, March 30th, 1888. Number of Graduates, 9. Date of Com-

Ayres, Mrs. Emma F.	New York		
Dunlevy, Miss Rita	New York		
Goodman, Mrs. Julia	Lebanon, Ohio		
Gutberg, Mrs. Lizzie	Alabama		
Trous, Mrs. Francina L.	New York		
Tuttle, Miss Ella	New York		
White, Mrs. M. Louisa	New York		
White, Miss A. Lenora	Georgia		
Roder, Mrs. Lizzie B.	New York		

COLLEGE AND HOSPITAL—CONTINUED.

Time of Study.	Number of Courses Attended, and Where.
Years.	
3	3 courses in New York Hom. Medical College.
3	3 courses in New York Hom. Medical College.
3	3 courses in New York Hom. Medical College.
3	3 courses in New York Hom. Medical College.
4	3 courses in New York Hom. Medical College.
3	3 courses in New York Hom. Medical College.
3	3 courses in New York Hom. Medical College.
3	3 courses in New York Hom. Medical College.
3	3 courses in New York Hom. Medical College.
4	4 courses, 2 in University of New York.
2	2 courses in New York Hom. Medical College.
3	2 courses in New York Hom. Medical College.
3	3 courses in New York Hom. Medical College.
3	3 courses in New York Hom. Medical College.
3	3 courses in New York Hom. Medical College.
3	3 courses in New York Hom. Medical College.
3	3 courses in New York Hom. Medical College.
3	3 courses in New York Hom. Medical College.
4	3 courses in New York Hom. Medical College.
3	3 courses. 2 in Eclectic Medical College; 1 in N. Y. Hom. Med. College.
3	3 courses in New York Hom. Medical College.
3	3 courses in New York Hom. Medical College.
4	4 courses in New York Hom. Medical College.
3	3 courses in New York Hom. Medical College.

AND HOSPITAL FOR WOMEN.

of weeks, 26. Number of Matriculates in attendance during Session, 42. Number
mencement, April 24th, 1888.

3	3 courses in New York Medical College and Hospital for Women.
3	3 courses in New York Medical College and Hospital for Women.
3	2 courses in State Normal Univ. of Lebanon, Ohio; 2 in N. Y. Med. Col. and Hospital for Women.
3	3 courses in New York Medical College and Hospital for Women.
4	4 courses in New York Medical College and Hospital for Women.
3	3 courses in New York Medical College and Hospital for Women.
3	3 courses in New York Medical College and Hospital for Women.
3	3 courses in New York Medical College and Hospital for Women.
5	4 courses in New York Medical College and Hospital for Women.

CLEVELAND HOMŒOPATHIC HOSPITAL

Session commenced, September 28th, 1887. Session closed, March 21st, 1888. Num-
Number of Graduates, 36. Date of

Name.	Residence.	Age.	Preceptor.
Adams, M. L.	Wayne, Pa.	25	J. H. Phillips, M.D.
Adams, C. B	Cleveland, Ohio	29	Helen Champlin, M.D.
Anderson, W. T.	Galveston, Texas	28	M. M. Moffitt, M.D
Bell, C. L. V.	Greenwich, Ohio	24	College
Benson, M. E.	Edison, Ohio	25	M. M. Scheble, M.D.
Cole, P. A.	Syracuse, N. Y.	26	G. J. Jones, M.D.
Clarke, S. M.	Binghamton, N. Y.	27	Kate Parsons, M.D.
Guile, E. B.	Booneville, N. Y.	21	W. Warren, M.D.
Hall, C. A.	Warners, N. Y.	32	B. A. Anthony, M.D.
Hunt, F. M.	Sidney, Ohio.	27	H. E. Beebe, M.D.
Howell, C. A.	Bridgetown, Barbadoes	21	H. Pomeroy, M.D.
Henderson, I F.	Titusville, Pa.	32	A. F. Canfield, M.D.
Harris, Alice	Clarinda, Iowa	25	W. Jeffery, M.D.
Haegy, Jno.	Freeport, Pa.	24	J. Cleeland, M.D.
Hathaway, U. S.	Hornellsville, N. Y.	39	W. E. Hathaway, M.D.
Hewitt, W. C.	Urbana, Ohio	21	H. C. Houston, M.D.
Hauver, C. E.	Sidney, Ohio	28	H. E. Beebe, M.D.
Jones, F. G.	Cleveland, Ohio	21	G. J. Jones, M.D.
Kimberly, W. T.	Cleveland, Ohio	27	C. D. Ellis, M.D.
Lockwood, R. L.	Wakamsa, Ind.	28	H. A. Mummaw, M.D.
Mehurin, A. E.	Columbus, Ohio	30	College
Robinson, E. H.	Hamilton, Ont	21	Jno. Hall, M.D.
Roper, F. E.	Lanby, N. Y.	24	W. E. Roper, M.D.
Read, J. S.	Rochester, N. Y.	24	J. M. Lee
Rowley, Charles	Victor, N. Y.	25	H. F. Biggar, M.D.
Shafer, Jno.	Warren, Ohio	27	H. A. Sherwood, M.D.
Sherman, M. E.	Castile, N. Y.	35	H. M. Dayfoot, M.D.
Slosson, C. H.	Cleveland, Ohio	22	H. Slosson, M D
Smith, E. A.	South Euclid, Ohio	26	W. T. Miller, M.D.
Stoner, J. W.	Ganges, Ohio	27	G. W. Kester, M.D.
Shaw, E. E.	Waseon, Ohio	21	G. E. Tunill, M.D.
Tims, W. A.	Sparta, Ohio	24	I. H. Tims, M.D.
Tiffany, T. J.	New Milford, Pa.	32	H. K. Leonard, M.D.
Waite, K. B.	Cleveland, Ohio	25	A. C. Buell, M.D.

PULTE MEDICAL COLLEGE

Session commenced September 28, 1887. Session closed March 1st, 1888. Number
of Graduates, 30. Date of Com-

Anderson, Clarence	Hopkinsville, Ky.	21	James A. Young, M.D.
Bulla, J. M., Jr.	Richmond, Ind.	29	T. Henry Davis, M.D.
Carrick, R. L.	Georgetown, Ky.	22	Drs. Lucy and Thomason.
Clifford, Geo. G.	San Antonio, Texas	21	Joseph Jones, M.D.
Crawfis, Geo. A.	Sharon, Pa.	24	C. W. Hoyt, M.D.
Culter, F. O.	Russelvile, Ohio	27	W. S. Mullins, M.D.
Davis, J. H.	Dallas, Ohio	29	Edw. Behymer, M.D.
Eaton, M. M., Jr.	Cincinnati, Ohio	21	M. M. Eaton, M.D.
Greene, S. Ward	Cincinnati, Ohio	32	T. Sumner Greene, M.D.

COLLEGE OF CLEVELAND, OHIO.

ber of weeks, 24. Number of Matriculates in attendance during Session, 92. Commencement, March 23d, 1888.

Time of Study.	Number of Courses Attended, and Where.
Years.	
3	3 courses in Cleveland Hom. Hospital College.
4	3 courses in Cleveland Hom. Hospital College.
3	2 courses in Cleveland Hom. Hospital College.
3	3 courses in Cleveland Hom. Hospital College.
3	2 courses in Cleveland Hom. Hospital College.
3	2 courses in Cleveland Hom. Hospital College.
3	3 courses in Cleveland Hom. Hospital College.
3	2 courses in Cleveland Hom. Hospital College.
3	2 courses in Cleveland Hom. Hospital College.
4	2 courses in Cleveland Hom. Hospital College.
3	2 courses in Cleveland Hom. Hospital College.
3	2 courses in Cleveland Hom. Hospital College.
3	2 courses in Cleveland Hom. Hospital College.
3	2 courses in Cleveland Hom. Hospital College.
3	2 courses in Cleveland Hom. Hospital College.
3	3 courses in Cleveland Hom. Hospital College.
3	2 courses in Cleveland Hom. Hospital College.
3	3 courses in Cleveland Hom Hospital College.
3	3 courses in Cleveland Hom. Hosp. Coll., and 1 course, Wooster Univ.
3	2 courses in Cleveland Hom. Hospital College.
4	3 courses in Cleveland Hom. Hospital College.
4	3 courses in Cleveland Hom. Hospital College.
3	3 courses in Cleveland Hom. Hospital College.
3	3 courses in Cleveland Hom. Hospital College.
3	3 courses in Cleveland Hom. Hospital College.
3	3 courses in Cleveland Hom. Hospital College.
3	3 courses in Cleveland Hom. Hospital College.
3	3 courses in Cleveland Hom. Hospital College.
3	2 courses in Cleveland Hom. Hospital College.
3	3 courses in Cleveland Hom. Hospital College.
3	3 courses in Cleveland Hom. Hospital College.
4	3 courses in Cleveland Hom. Hospital College.
3	2 courses in Cleveland Hom. Hospital College.
3	2 courses in Cleveland Hom. Hospital College.

CINCINNATI, OHIO.

of weeks, 21. Number of Matriculates in attendance during Session, 63. Number mencement, March 1st, 1888.

3	1 course in Hahn. Med. College, Chicago, and 1 in Pulte Medical College.
3	2 courses in Pulte Medical College, Cincinnati.
4	3 courses in Pulte Medical College, Cincinnati.
3	2 courses in Pulte Medical College, Cincinnati. *
3	2 courses in Pulte Medical College, Cincinnati.
3	2 courses in Pulte Medical College, Cincinnati.
3	3 courses in Pulte Medical College, Cincinnati.
5	3 courses in Pulte Medical College, Cincinnati.
3	2 courses in Pulte Medical College, Cincinnati.

* Gold Medal Man.

PULTE MEDICAL COLLEGE,

Name.	Residence.	Age.	Preceptor.
Hakes, Chas. W.	Binghamton, N. Y.	29	E. E. Snyder, M.D.
Harper, Edward	Greenfield, O.	24	W. L. McCreary, M.D.
Hills, Howard B.	Carthage, O.	38	C. D. Crank, M.D.
King, F. L	Cincinnati, O.	26	M. M. Hatfield, M.D.
Kirkpatrick, A. S.	Van Wert, O.	54	Practitioner
Knight, W. B.	Cincinnati, O.	21	D. W. Hartshorn, M.D.
Leatherman, J. H.	Pittsburgh, O.	36	Practitioner
Light, G. A.	Columbus Grove, O.	28	H. T. Breckbill, M.D.
Linn, T. E.	Monroe, O.	21	Charles Steddom, M.D.
Lyon, Geo. G.	Demopolis, Ala.	27	W. H. Barry, M.D.
Noble, Wm. A.	Fredonia, N. Y.	22	J. D. Buck, M.D.
Partridge, W. T.	Cincinnati, O.	27	J. M. Crawford, M.D.
Roberts, W. P.	Georgetown, Ky.	21	Drs. Lucy & Thomason
Sage, N. L.	Ingersoll, Canada	27	I. Bentley, M.D.
Scheib, John P.	Tiffin, O.	22	F. W. Scheib, M.D.
Simmons, G. W.	Newark, Del.	43	L. M. Whistler, M.D.
Stubbs, W. C.	West Elkton, O.	26	Elwood Holaday, M.D.
Sullivan, J. B.	Pittsburgh, Pa.	36	H. H. Willard, M.D.
Summers, D. V.	Mt. Vernon, O.	25	Pulte Medical College
Wilds, J. L.	Nicholasville, Ky.	35	Practitioner
Zimmerman, Wm. H.	Richmond, Ind.	32	J. Emmons, M.D.

HAHNEMANN MEDICAL COLLEGE

Session commenced October 3d, 1887. Session closed April 6th, 1888. Number of Graduates, 48. Date of Com-

Allcutt, David J.	Pennsylvania		R. P. Mercer, M.D.
Ayers, Charles A.	Pennsylvania		W. H. Van Baun, M.D.
Baier, George F.	Pennsylvania		F. Buckman, M.D.
Barnart, Newton H.	New Jersey		Hahnemann Medical Col.
Bayley, Weston D.	Pennsylvania		B. R. Marsden, M.D.
Bierman, Henry	Pennsylvania		D. W. Straup, M.D.
Boger, Cyrus M.	Pennsylvania		E. R. Snader, M.D.
Branin, John W.	Pennsylvania		J. E. Peters, M.D.
Cate, Harry H.	New Jersey		H. J. Cate, M.D.
Chisolm, Henry Clay	Pennsylvania		H. Pitcairn, M.D.
Clarke, James C., Jr.	Pennsylvania		J. W. Leckie, M.D.
Coy, Herbert B.	Massachusetts		R. W. Southgate, M.D.
Custis, Geo. W. N., A.M., M.D.	District of Columbia		Howard University, D. C.
Drane, Frank C.	Pennsylvania		P. J. Langer, M.D.
Esrey, Lewis K.	Pennsylvania		Hahnemann Medical Col.
Finney, Everett B.	Nebraska		B. L. Paine, M.D.
Furman, Horace S.	Pennsylvania		C. S. Middleton, M.D.
Gardiner, Wm. S.	Pennsylvania		D. E. Gardiner, M.D.
Godshall, Samuel G.	Pennsylvania		Chandler Weaver, M.D.
Haag, John B.	Pennsylvania		Max Reinhold, M.D.
Hanzig, Gustav E.	Pennsylvania		Dr. Smith

CINCINNATI, OHIO—CONTINUED.

Time of Study.	Number of Courses Attended, and Where.
Years.	
3	2 courses in Pulte Medical College, Cincinnati.
3	3 courses in Pulte Medical College, Cincinnati.
3	3 courses in Pulte Medical College, Cincinnati.
3	3 courses in Pulte Medical College, Cincinnati.
18	1 course in Cleveland Hospital College and 1 in Pulte Medical College, Cin.
5	4 courses in Pulte Medical College, Cincinnati.
15	3 courses in Pulte Medical College, Cincinnati.
7	2 courses in Pulte Medical College, Cincinnati.
3	3 courses in Pulte Medical College, Cincinnati.
3	2 courses in Pulte Medical College, Cincinnati.
3	3 courses in Pulte Medical College, Cincinnati.
3	3 courses in Pulte Medical College, Cincinnati.
4	3 courses in Pulte Medical College, Cincinnati.
4	3 courses in Pulte Medical College, Cincinnati.
4	3 courses in Pulte Medical College, Cincinnati.
8	2 courses in Pulte Medical College, Cincinnati.
4	3 courses in Pulte Medical College, Cincinnati.
4	3 courses in Pulte Medical College, Cincinnati.
3	3 courses in Pulte Medical College, Cincinnati.
5	1 course in Chicago Hom. College, and 1 in Pulte Med. College, Cincinnati.
3	3 courses in Pulte Medical College, Cincinnati.

OF PHILADELPHIA, PA.

of weeks, 27. Number of Matriculates in attendance during Session, 184. Number
mencement, April 6th, 1888.

1884	3 courses in Hahnemann Medical College.
1885	3 courses in Hahnemann Medical College.
1882	3 courses in Hahnemann Medical College.
1885	3 courses in Hahnemann Medical College.
1881	3 courses in Hahnemann Medical College.
1885	3 courses in Hahnemann Medical College.
1884	3 courses in Hahnemann Medical College.
1885	3 courses in Hahnemann Medical College.
1885	3 courses in Hahnemann Medical College.
1885	3 courses in Hahnemann Medical College.
1885	3 courses in Hahnemann Medical College.
1884	3 courses in Hahnemann Medical College.
.....	1 course in Hahnemann Medical College.*
1882	3 courses in Hahnemann Medical College.
1885	3 courses in Hahnemann Medical College.
1885	3 courses in Hahnemann Medical College.
1885	3 courses in Hahnemann Medical College.
1884	3 courses in Hahnemann Medical College.
1884	3 courses in Hahnemann Medical College.
1884	3 courses in Hahnemann Medical College.
1880	2 courses in Hahnemann Medical College.†

* Graduate of Howard University, 1887.
† Not consecutively.

HAHNEMANN MEDICAL COLLEGE

Name.	Residence.	Age.	Preceptor.
Heron, Wm. H., M.D.	District of Columbia		Howard University, D.C.
Hill, E. Hart	New Jersey		J. O'Hara
Kaufman, John	Pennsylvania		J. W. Leckie
Kase, Edmund H.	Pennsylvania		R. Reed
Lieb, Andrew G.	Pennsylvania		R. L. Dartt
Lindley, Havard	Maryland		E. C. Price
Macdonald, T. L.	Massachusetts		H. E. Packer
Martin, Stoddard S.	Pennsylvania		H. Noah Martin
McPherson, Finley	New York		John C. McPherson
Merrell, Albert F.	New York		M. N. Smith
Merriam, Frank E.	Pennsylvania		C. F. Manson
Morrison, Benj. D.	West Virginia		J. W. Morris
Peters, Isadore L.	Pennsylvania		M. J. Holben
Price, Samuel W.	Pennsylvania		T. S. Dunning
Reading, Thomas	Pennsylvania		E. Reading
Seitz, William C.	Pennsylvania		H. W. Fair
Sharp, Lewis L.	New Jersey		S. Griffith
Shivers, Bowman H., M.D.	New Jersey		Penna. Med. University
Shoemaker, James L.	Pennsylvania		John V. Allen
Sierer, A. L.	Pennsylvania		J. H. Deardorff
Smith, S. B., Jr.	New Jersey		M. F. Middleton
Tindall, Charles L.	Pennsylvania		Van R. Tindall
Tortat, A. Emile	Pennsylvania		Hahn. Medical College
Tretton, John K.	Pennsylvania		F. M. Wright
Trinkle, Wilmer W.	Pennsylvania		S. M. Trinkle
Walter, Robert, H.D.	Pennsylvania		Hahn. Medical College
Young, William S. S.	Pennsylvania		F. W. Messerve

OF PHILADELPHIA, PA.—CONTINUED.

Time of Study.	Number of Courses Attended, and Where.
	1 course in Hahnemann Medical College.*
1885	3 courses in Hahnemann Medical College.
1885	3 courses in Hahnemann Medical College.
1885	3 courses in Hahnemann Medical College.
1885	3 courses in Hahnemann Medical College.
1885	2 courses in Hahnemann Medical College.†
1885	3 courses in Hahnemann Medical College.
1880	3 courses in Hahnemann Medical College.
1885	2 courses in Hahnemann Medical College.
1884	3 courses in Hahnemann Medical College.
1882	3 courses in Hahnemann Medical College.
1884	3 courses in Hahnemann Medical College.
1885	3 courses in Hahnemann Medical College.
1885	3 courses in Hahnemann Medical College.
1885	3 courses in Hahnemann Medical College.
1884	3 courses in Hahnemann Medical College.
1884	3 courses in Hahnemann Medical College.
1856	1 course in Hahnemann Medical College.‡
1885	3 courses in Hahnemann Medical College.
1884	3 courses in Hahnemann Medical College.
1885	3 courses in Hahnemann Medical College.
1884	4 courses in Hahnemann Medical College.
1880	2 courses in Hahnemann Medical College.§
1884	3 courses in Hahnemann Medical College.
1885	3 courses in Hahnemann Medical College.
	2 courses in Hahnemann Medical College.‖
1884	3 courses in Hahnemann Medical College.

* Graduate of Howard University, 1887.
† Partial course in Maryland University.
‡ Graduate of Pennsylvania Medical University, 1858.
§ Graduate of Eclectic Therapeutic Institute, 1882.
‖ Graduate of Trall's Hydropathic College, 1870.

MEMBERS OF THE AMERICAN INSTITUTE OF HOMŒOPATHY FROM ITS ORGANIZATION.

COMPILED BY HENRY M. SMITH, M.D., NEW YORK, N. Y.

[AN ASTERISK (*) AFFIXED TO A DATE SIGNIFIES THAT THE NAME DOES NOT APPEAR ON THE CATALOGUE OF THAT YEAR.]

1883 ABBOTT, CLARENCE G., M.D., Woodbury, N. J. Hahn., Phil, 1879.
1851 ABBOTT, JEHIEL, M.D., died Sept. 23d, 1872, æt. 77. Tr. '73, 512.
1870 ABELL, DANIEL T., M.D., Sedalia, Mo. Hahn., Phil., 1860.
1872 ABERCROMBIE, WILLIAM H., M.D. 1887.*
1886 ADAMS, CLIFFORD B., M.D., New Haven, Conn. Hahn., Phil., 1872.
1875 ADAMS, FRANK S., M.D. 1875.*
1887 ADAMS, GEORGE SMITH, M.D, Westborough, Mass. Hahn., Phil., 1876.
1846 ADAMS, HENRY, M.D., died (?). Tr. '69, 156.
1871 ADAMS, MYRON H., M.D. 1883.*
1876 ADAMS, REUBEN A., M.D., Rochester, N. Y. Hahn., Phil., 1868.
1846 ADAMS, R. E. W., M.D., died Dec., 1869.
1860 AHLBORN, HENRY, M.D. 1878.*
1867 ALBERTSON, J. A., M.D., San Francisco, Cal. Hahn., Chicago, 1862.
1888 ALDRICH, HENRY C., M.D., Minneapolis, Minn. Hahn., Phil., 1881.
1881 ALLEN, ALBION HORACE, M.D., New London, Conn. Boston Univ., 1875.
1880 ALLEN, CHARLES, M.D., Washington, D.C. Georgetown Univ., 1861.
1873 ALLEN, GEORGE D., M.D., Portland, Mich. Clev. Hom., 1866.
1881 ALLEN, GEORGE EDGAR, M.D., Youngstown, Ohio. Boston Univ., 1877.
1872 ALLEN, HENRY C., M.D., Ann Harbor, Mich. Clev. Hom., 1861.
1848 ALLEN, JAMES H., M.D., died (?).
1887 ALLEN, LAMSEN, M.D., Southbridge, Mass. N. Y. Hom., 1883.
1871 ALLEN, RICHARD C., M.D., Philadelphia, Pa. Hahn., Phil., 1868.
1871 ALLEN, SAMUEL E., M.D. 1878.*
1866 ALLEN, TIMOTHY FIELD, M.D., New York. N. Y. Univ., 1861.
1860 ALLEY, JAMES T., M.D., died September 17th, 1878, æt. 47. Tr. '79, 1243.
1875 ALLING, CHARLES P., M.D. 1881.*
1868 ALVORD, SAMUEL, M.D., Chicopee Falls, Mass.
1874 ANDERSON, JEREMIAH, M.D. 1878.*
1879 ANDERSON, JOSEPH C., M.D. 1885.*
1846 ANDERSON, MOSES, M.D., Philadelphia, Pa., died April 18th, 1855, æt. 57. Tr. '67, 156.
1853 ANDERSON, MOSES, M.D., New York, died 1862. Tr. '67, 156.

1869 ANDERSON, WILLIAM D., M.D. 1875.*
1846 ANDREWS, J. R., M.D., died February 19th, 1864, æt. 46. Tr. '67, 156.
1867 ANDREWS, JOEL R., M.D., New York, died June 1st, 1870, æt. 52. Tr. '70, 625–633.
1876 ANDREWS, PURNELL W., M.D. 1884.*
1871 ANDREWS, WILLIAM, M.D. 1881.*
1868 ANGELL, EDWIN P., M.D. 1869.*
1853 ANGELL, HENRY C., M.D., Boston, Mass. Hom. Med., Penna., 1852.
1846 ANNIN, JONATHAN D., M.D., died September 26th, 1883, æt. 77.
1870 ANTHONY, WILLIAM C., M.D., resigned 1873.
1869 ARCULARIUS, PHILIP EDWARD, M.D., New York. N. Y. Col. Phys. and Surgs., 1867.
1871 ARMOR, SMITH, M.D. 1877.*
1851 ARMOR, THOMAS, M.D. 1867.*
1873 ARMSTRONG, WILLIAM P., M.D., resigned 1878, re-elected 1880. 1884.*
1882 ARNDT, HUGO R., M.D., Grand Rapids, Mich. Clev. Hom., 1869.
1869 ARTHUR, ASA ADGATE, M.D. 1869,* 1882.*
1874 ARTHUR, CHARLES, M.D., resigned 1887.
1858 ASHTON, ADOLPHUS H., M.D., died February 18th, 1883.
1871 ATEN, HENRY F., M.D. 1881.*
1846 ATWOOD, MOSES, M.D., died April 28th, 1850, æt. 49. Tr. '67, 156.
1872 AUSTIN, JAMES H., M.D., died March 27th, 1873, æt. 49. Tr. '74, 666.
1875 AUSTIN, JOHN, M.D. 1879.*
1870 AUSTIN, PHILIP A., M.D. 1875.*
1869 AVERY, EDWARD WOODBRIDGE, M.D. 1874.*
1867 AVERY, HENRY N., M.D. 1874.*
1885 BABCOCK, DANIEL ARNOLD, M.D., Fall River, Mass. N. Y. Hom., 1874.
1868 BACMEISTER, THEODORE, M.D. 1878.*
1871 BACON, CHARLES AUSTIN, M.D., Washington, D.C. N. Y. Med. Col., 1863.
1867 BAER, OLIVER P., M.D., Richmond, Ind. Hahn., Phil, 1867.
1869 BAETHIG, HENRY, SR., M D., died December 5th, 1871. Tr. '73, 512.
1874 BAETHIG, HENRY, M.D., Buffalo, N. Y. Hahn., Phil., 1870.
1870 BAGLEY, ALVIN, M.D. 1875.*
1870 BAGLEY, HERMAN B., M.D., Seattle, Washington Ter. Clev. Hom., 1865.
1875 BAHRENBURG, WILLIAM N, M.D. 1879.*
1887 BAILEY, ALFRED WILLIAM, M.D., Atlantic City, N. J. Hahn., Phil., 1886.
1873 BAILEY, BENJAMIN F., M.D. 1878.*
1888 BAILEY, BENJAMIN F., M.D., Lincoln, Neb. Hahn., Phil., 1881.
1879 BAILEY, EDWARD S., M.D. 1885.*
1867 BAILEY, GEORGE W., M.D., resigned 1879.
1867 BAILEY, J. B., M.D. 1874.*
1874 BAILEY, SILAS, M.D., resigned 1879.
1868 BAIRD, WILLIAM P., M.D. 1869.*
1881 BAKER, ALFRED E., M.D., Philadelphia, Pa. Hahn., Phil., 1880.
1881 BAKER, ALMENA JANE, M.D., Boston, Mass. Boston Univ., 1876.
1871 BAKER, DANIEL P., M.D. 1877.*
1847 BAKER, GEORGE, M.D., died December 25th, 1852, æt. 56. Tr. '67, 156.
1886 BAKER, HARRY C., M.D., Kansas City, Mo. Hom., St. Louis, 1870.

1858 BAKER, JOSEPH C., M.D., died February 23d, 1865, æt. 50. Tr. '67, 156.
1872 BAKER, MARY G., M.D., died February, 1880.
1875 BAKER, MILTON H., M.D., Highland Park, Ill. Hahn., Chicago, 1868.
1870 BAKER, ROBERT F., M.D., Davenport, Iowa.
1869 BAKER, WALTER S., M.D. 1874.*
1871 BALDWIN, AARON, M.D., Washington, D.C. Clev. Hom., 1871.
1855 BALDWIN, DAVID A., M.D. 1867.*
1876 BALDWIN, HARRY D., M.D. 1886.*
1857 BALDWIN, JARED G., M.D., New York. N. Y. Univ., 1853.
1888 BALDWIN, ORPHA D, M.D., Cleveland, Ohio. Boston Univ., 1885.
1844 BALL, ALONZO S., M.D., New York.
1870 BALLARD, EDGAR ABBOTT, M.D. 1875.*
1883 BALLARD, LAURA A. STOW, M.D., San Francisco, Cal. Hahn., Chicago, 1875.
1870 BANCROFT, AUGUSTINE A., M.D. 1878.*
1868 BANCROFT, WALTON, M.D., Keokuk, Ill. St. Louis Col., 1860.
1866 BANER, WILLIAM JONES, M.D., died November 6th, 1885. Tr. '86, 140.
1876 BANKS, JAMES O., M.D. 1881.*
1888 BARBER, OSCAR M., M.D., Mystic, Conn. N. Y. Hom., 1871.
1881 BARCHET, STEPHEN P., M.D. 1885.*
1888 BARDEN, JOHN M., M.D., Mansfield, Pa. N. Y. Hom., 1862.
1870 BARDEN, OLIVER P., M.D. 1875.*
1881 BARKER, CLARENCE F., M.D., Manistee, Mich. Hahn., Chicago, 1880.
1867 BARKER, WILLIAM CALVIN, M.D., Waukegan, Ill. Clev. Hom., 1860.
1846 BARLOW, SAM'L BANCROFT, M.D., died Feb. 27th, 1876, æt. 78. Tr. '77, 967.
1866 BARNABY, JOHN E., M.D., died January 5th, 1869. Tr. '70, 625.
1853 BARNES, GEORGE WILLIAM, M.D., San Diego, Cal. Clev. Hom., 1851.
1877 BARNES, LEWIS, M.D. 1884.*
1881 BARNETT, AMELIA, M.D., New York. N. Y. Wom. Col., 1865.
1886 BARNSDELL, JOSEPH WALKER, M.D., Omaha, Neb. Chicago Hom., 1884.
1875 BARR, FRANK H., M.D. 1881.*
1877 BARRETT, ALBERT R., M.D. 1884.*
1870 BARRETT, CHARLES B., JR., M.D. 1871.*
1848 BARROWS, GEORGE, M.D., died January 18th, 1878, æt. 65. Tr. '78, 1114.
1868 BARROWS, GEORGE S., M.D., Marion, Kansas. Hahn., Chicago, 1877.
1846 BARROWS, IRA, M.D., died October 14th, 1882, æt. 78. Tr. '83, 147.
1857 BARTLETT, ABNER R., M.D., died December 26th, 1880. Tr. '81, 134.
1886 BARTLETT, CLARENCE, M.D., Philadelphia, Pa. Hahn., Phil., 1879.
1867 BARTLETT, EDWARD G., M.D. 1879.*
1846 BARTLETT, E. M., M.D. 1867.*
1873 BARTLETT, HENRY H., M.D., Leslie, Mich. Clev. Hom., 1869.
1879 BARTON, JEDEDIAH MARCUS, M.D. 1885.*
1874 BASCOM, HENRY M., M.D. 1874.*
1874 BASS, EDGAR C., M.D. 1879.*
1880 BASSETT, JOHN S., M.D., New York. Berk. Med. Col., 1850.
1846 BAUER, A., M.D. 1867.*
1868 BAXTER, H. H., M.D. 1882.*
1847 BAXTER, WILLIAM, M.D., died July 3d, 1875, æt. 70. Tr. '77, 982.
1844 BAYARD, EDWARD, M.D., New York. N. Y. Univ., 1844.

1887 BAYLES, HERMAN G., M.D. 1887.*
1867 BAYLIES, BRADFORD LE BARON, M.D., Brooklyn, N. Y. N. Y. Col. Physicians and Surgeons, 1852.
1887 BAYNUM, MARY HENDRICK, M.D., Boston, Mass. Boston Univ., 1885.
1850 BEAKLEY, GEORGE, M.D., died March 7th, 1879, æt. 62.
1859 BEAKLEY, HENRY, M.D., deceased.
1848 BEAKLEY, JACOB, M.D., died September, 1872, æt. 60.
1884 BEAL, DANIEL W., M.D. 1884.*
1848 BEARD, D. H., M.D., deceased. Tr. '67, 156.
1870 BEAUMONT, JOHN H., M D., died February 24th, 1883.
1883 BECK, JUDSON LESTER, M.D. 1887.*
1869 BECKER, BENJAMIN, M.D. 1879.*
1878 BECKER, FREDERICK W., M.D., Cincinnati, O. Berlin Univ., 1863.
1865 BECKWITH, DAVID HERRICK, M.D., Cleveland, O. Clev. Hom., 1851.
1871 BECKWITH, EPHRAIM CRAIG, M.D., died November 30th, 1880.
1857 BECKWITH, SETH R., M.D. Clev. Hom., 1853.
1886 BEDELL, LEILA GERTRUDE, M.D., Chicago, Ill. Boston Univ., 1878.
1875 BEDELL, R. HEBER., M.D. 1879.*
1869 BEEBE, A. GAYLORD, M.D. 1881.*
1877 BEEBE, CLARENCE E., M.D., New York. N. Y. Univ., 1873.
1870 BEEBE, EUGENE W., M.D., Milwaukee, Wis. Hahn., Chic., 1866.
1857 BEEBE, GAYLORD D., M.D., resigned 1872.
1876 BEEBE, HENRY E., M.D., Sidney, O. Clev. Hom., 1873.
1870 BEEBE, NELSON D., M D., died December 22d, 1872, æt. 40. Tr. '75, 805.
1854 BEERS, ALFRED H., M.D., died January 12th, 1869, æt 41.
1846 BELCHER, GEORGE ELISHA, M.D., New York. N. Y. Col. Physicians and Surgs., 1839.
1867 BELDEN, I. G., M.D. 1867.*
1847 BELL, H. W., M.D., died July, 1863, æt. 63. Trs. '67, 156; '68, 284; '70, 634.
1846 BELL, SANFORD, M.D. 1867.*
1851 BELL, WILLIAM C., M.D., Middletown, Conn. Pittsfield, 1833.
1868 BELL, JAMES BACHELDER, M.D., Boston, Mass. Hahn., Phil., 1859.
1867 BELL, JAMES S., Canton, Dak. N. Y. Hom., 1866.
1859 BELLOWS, ALBERT G., M.D., died December, 1869. Tr. '70, 625.
1877 BELLOWS, HOWARD PERRY, M.D., Boston, Mass. Boston Univ., 1877.
1846 BELT, R. G., M.D., died. Tr. '67, 156.
1872 BENDER, PROSPER, M.D., Boston, Mass. McGill Univ., Montreal, 1865.
1867 BENEDICT, HARRIS S., M.D., died October 18th, 1869, æt. 46.
1873 BENEDICT, THOMAS B., M.D., died March 1st, 1874, æt. 45. Tr. '74, 665.
1872 BENHAM, FRANCIS A., M.D. 1879.*
1875 BENNETT, ASAHEL M., M.D., died March, 1885. Tr. '85, 96.
1888 BENNETT, FRANCIS M., M.D., Chicopee, Mass. N. Y. Hom., 1883.
1846 BENNETT, HILEM, M.D., died October 28th, 1868, æt. 77. Tr. '70, 625, 635.
1869 BENNETT, HOLLIS K., M.D., Fitchburg, Mass. Tenn. Univ., 1860.
1881 BENNETT, JAMES ALBERT, M.D., New York. N. Y. Hom., 1870.
1881 BENNETT, NEHEMIAH KNIGHT, M.D., Brooklyn, N. Y. N. Y. Hom., 1877.
1876 BENNETT, ROBERT A., M.D., Dover, N. J. N. Y. Hom., 1874.
1874 BENNITT, WILLIAM W., M.D. 1881.*

1865 BENSON, P. OSCAR C. 1881.*
1882 BERAUD, PAUL, M.D., resigned 1885.
1846 BERENS, BERNHARD, M.D., Philadelphia, Pa.
1846 BERENS, JOSEPH, M.D., Philadelphia, Pa. Univ. of Pa., 1841.
1872 BERGHAUS, ALEXANDER, M.D., New York. N. Y. Univ., 1870.
1858 BERGHAUS, JULIUS MARTIN, M.D., died October 17th, 1878, æt. 52.
1870 BETTS, B. FRANKLIN, M.D., Philadelphia, Pa. Hahn., Phil., 1868.
1869 BEVIN, WILLIAM A., M.D. 1886.*
1874 BIEGLER, JOSEPH A., M.D., Rochester, N. Y. Univ. of Pa., 1857.
1887 BIER, PETER A., M.D., Pittsburgh, Pa. Pulte, Cin., 1878.
1854 BIGELOW, FRANKLIN, M.D., died March 12th, 1879, æt. 52. Tr. '79, 1249; '80, 141.
1854 BIGELOW, JOSHUA G., M.D. 1874.*
1868 BIGGAR, HAMILTON FISK, Cleveland, O. Clev. Hom., 1866.
1850 BIGLER, GEORGE W., died April 28th, 1871.
1876 BIGLER, WILLIAM HOWARD, Philadelphia, Pa. Hahn., Phil., 1871.
1866 BILLINGS, GEORGE W., M.D. 1872.*
1871 BINGAMAN, CHARLES F., M.D., Pittsburgh, Pa. Hahn., Phil., 1871.
1881 BINGHAM, HELEN MARIA, M.D., Milwaukee, Wis. Boston Univ., 1881.
1871 BINGHAM, OSCAR M., M.D. 1873.*
1869 BIRCH, GEORGE B. 1876.*
1887 BIRDSALL, ASAHEL H., M.D., Brooklyn, N. Y. Hahn., Phil., 1873.
1881 BIRDSALL, STEPHEN T., M.D., Glens Falls, N. Y. Hom., Penn., 1868.
1865 BIRNSTILL, JOSEPH, died February 16th, 1867, æt. 56. Tr. '67, 156.
1854 BISHOP, DAVID FOWLER, M.D., died April 24th, 1885, æt. 57. Tr. '86, 130.
1883 BISHOP, FRANK A., Hannibal, Mo. Hahn., Phil., 1876.
1869 BISHOP, HERBERT MARTIN, M.D., Norwich, Conn. N. Y. Hom., 1867.
1870 BISHOP, LEWELLYN A., M.D. 1885.*
1853 BISSELL, ARTHUR F., M.D., New York. N. Y. Col. Phys. and Surgs., 1847.
1870 BITELY, EUGENE, M.D., died March 31, 1873, æt. 49. Tr. '74, 661.
1865 BLACKBURN, G. S., M.D., died August 21st, 1866, æt. 26. Tr. '67, 156; '68, 284.
1869 BLAIR, A. O., M.D., elected 1853, 1867.* Re-elected 1874, 1874.*
1870 BLAIR, GEORGE H., M.D. 1875.*
1869 BLAISDELL, JOHN M., M.D. 1874.*
1885 BLAKE, EDWARD T., M.D., London, Eng. Corresponding.
1865 BLAKELEY, WILLIAM JAMES, M.D., died January 14th, 1877.
1867 BLAKELOCK, RALPH, M.D. 1876.*
1882 BLAKELY, WILLIAM H., M.D., Bowling Green, Ky. Hom. Mo., 1866; N. Y. Hom., 1872.
1854 BLANCHARD, HENRY CHARLES, M.D. 1871.*
1854 BLANCHARD, J. A., M.D. 1868.*
1887 BLODGETT, STEPHEN HASKELL, M.D., Cambridge, Mass. Harvard, 1886.
1846 BLOSS, RICHARD, M.D., died September 3d, 1863, æt. 65. Tr. '67, 156.
1869 BLOSS, JABEZ P., M.D., Troy, N. Y. N. Y. Col. Phys. and Surgs., 1853.
1869 BLOSS, RICHARD D., M.D. 1869.*
1880 BOARDMAN, HORACE E., M.D., died Feb. 26th, 1888. æt. 53. Tr. '88, 228.
1844 BOARDMAN, JOSEPH C., M.D., Trenton, N. J. Penn. Univ., 1844.
1874 BOARDMAN, WILLIAM H., M.D. 1886.*

1886 BODLE, ARTHUR P., M.D. 1886.*
1865 BOERICKE, FRANCIS E., M.D., Philadelphia, Pa. Hahn., Phil., 1863.
1883 BOERICKE, WILLIAM, M.D., San Francisco, Cal. Hahn., Phil., 1880.
1887 BOJANUS, C., M.D., Moscow, Russia. Corresponding.
1873 BOLLEN, GEORGE, M.D. 1873.*
1874 BOLLEN, GEORGE M., M.D. 1878.*
1846 BOLLERS, RICHARD MONTGOMERY, M.D., died August 9th, 1865, æt. 63. Tr. '67, 156; '70, 637.
1874 BOND, MARY E., M.D., New York. N. Y. Eclect. Med., 1873.
1880 BOOTHBY, ALONZO, M.D., Boston, Mass.
1866 BORLAND, WILLIAM C., M D. 1881.*
1875 BOSLEY, SAMUEL CLEMENT, M.D. 1881.*
1872 BOSSERT, CHARLES, M.D., died December 19th, 1886. Tr. '87, 214.
1870 BOTSFORD, ALVA H., M.D. 1879.*
1867 BOWEN, ELEAZER, M.D. 1875.*
1869 BOWEN, GEORGE W., M.D., Fort Wayne, Ind. Hahn., Chic., 1863.
1867 BOWEN, HORACE, M.D. 1875.*
1846 BOWERS, BENJAMIN FRANKLIN, M.D., died Feb., 1875, æt. 79. Tr. '75, 794.
1846 BOWERS, JOSIAH, M.D., died November 7, 1868, æt. 77. Tr. '70, 630.
1871 BOWIE, ALONZO P., M.D., Uniontown, Pa.
1869 BOWMAN, BENJAMIN, Chambersburg, Pa. N. Y. Hom., 1865.
1875 BOWMAN, JOHN R., M D., died February 11, 1879, æt. 30. Tr. '79, 1251.
1866 BOYCE, C. WILLIAM, M.D. 1881.*
1882 BOYD, JAMES T., M.D. 1886.*
1888 BOYD, PHILANDER S., M.D., Nashville, Tenn. Tenn. Univ., 1888.
1870 BOYER, FRANCIS W, M.D., Pottsville, Pa. Hahn., Phila., 1869.
1885 BOYNTON, JOHN R., M.D., Leavenworth, Kan. Hahn., Phila., 1880.
1869 BOYNTON, S. A., M.D. 1869.*
1874 BOYNTON, FRANK H., M.D., New York. N. Y. Hom., 1874.
1869 BOYNTON, SUMNER H., M.D. 1869.*
1860 BRADFORD, FRANK STANDISH, M.D., Morristown, N. J. Jeff., Phila., 1858.
1871 BRADFORD, HERBERT C., M.D., resigned 1882.
1873 BRADFORD, OLIVER L., M.D. 1878.*
1846 BRADFORD, RICHMOND, M.D., died December 21, 1874, æt. 73. Tr. '75, 797.
1865 BRADFORD, THOMAS C., M.D., Cincinnati, Ohio. N. Y. Bellevue Hosp. Col., 1864.
1869 BRADFORD, THOMAS L., M.D. 1882.*
1882 BRADLEY, BENJAMIN ABBOTT, M.D., Cincinnati, Ohio. Pulte, Cin., 1882.
1874 BRADNER, FREDERICK HOUSTON, M.D., died January 8, 1880. Tr. '80, 142.
1883 BRADNER, IRA S., M.D., Middletown, N. Y. N. Y. Univ., 1843.
1853 BRAINARD, JEHU, M.D., died March 1878, æt. 71. Tr. '79, 1239.
1877 BRANSTRUP, WILLIAM THEOD., M.D., Topeka, Kan. Hahn., Chic., 1877.
1869 BRATT, BENJAMIN R., M.D., died January 31, 1872.
1867 BREY, JULIUS C., M D. 1869.*
1869 BREYFOGLE, CHARLES WESLEY, M.D., San Jose, Cal. Hahn., Phil., 1868.
1875 BREYFOGLE, EDWIN S., M.D. 1882.*
1873 BREYFOGLE, WM. LAMOTTINE, M.D., Louisville, Ky. Hom. Penn., 1866.
1869 BRICK, FRANCIS, M.D. 1882.*

1872 BRICKLEY, OBADIAH C., M.D. 1873.*
1869 BRIGHAM, GERSHORN N., M.D. 1878.*
1882 BRIGHAM, REEDER S., M.D., New Albany, Ind. Pulte, Cin., 1879. Elected 1874; 1879* re-elected.
1883 BRIGGS, ELMER ELLSWORTH, M.D., Pittsburgh, Pa. N. Y. Hom., 1883.
1867 BRINCK, WILLIAM, M D. Resigned 1873.
1869 BRIRY, MILTON S., M.D., Bath, Me. Bowdoin, 1853.
1854 BRISBANE, WILLIAM, M.D. 1867.*
1868 BRISTOL, BENNETT J., M.D. 1873.*
1887 BRITTON, EDGAR B., M.D., Baltimore, Md. Pulte, Cin., 1878.
1876 BRONSON, BENJAMIN F., M.D. 1885.*
1865 BRONSON, CHARLES C., M.D. 1872.*
1872 BRONSON, MILES HALL, M.D. 1872.*
1859 BROOKS, CHARLES A., M.D. 1882.*
1872 BROOKS, CHARLES G., M.D., died March, 1885.
1867 BROOKS, JOHN B., M.D. 1872.*
1860 BROOKS, SILAS S., M.D., died July 2, 1871.
1876 BROWN, ASA W., M.D., Providence, R. I. Clev. Hom., 1853.
1871 BROWN, BENJAMIN P., M.D. 1875.*
1874 BROWN, CHARLES R, M.D., died March 15, 1885, æt. 37. Tr. '85, 96.
1869 BROWN, D., M.D. 1879.*
1867 BROWN, EDWARD V., M.D., Tarrytown, N. Y. N. Y. Univ., 1863.
1881 BROWN, GEORGE W., M.D. 1882.*
1869 BROWN, GRANVILLE CURTIS, M.D. 1882.*
1885 BROWN, HENRY ALBERT, M.D., Reading, Mass. Boston Univ., 1877.
1867 BROWN, HENRY R., M.D. 1882.*
1860 BROWN, JOHN, M.D. 1867.*
1848 BROWN, JOSEPH R., M.D., deceased. Tr. '67, 156.
1860 BROWN, JOSIAH, M.D., died October 16, 1869, æt. 49. Tr. '70, 645.
1872 BROWN, SAMUEL, M.D., Philadelphia, Pa. Hom. Penn., 1858; elected in 1860. 1868.*
1867 BROWN, TITUS LONSOR, M.D., died August 17, 1887, æt. 59. Tr. '88, 226.
1874 BROWN, U. H., M.D. 1874.*
1872 BROWN, WILLIAM, M.D.; elected 1860. 1868,* 1877.*
1846 BROWN, WILLIAM R., M.D. 1853.*
1867 BROWNE, GARDNER S., M.D., deceased.
1876 BRUNS, FREDERICK, M.D., resigned 1885.
1874 BRYAN, EDWARD W., M.D. 1879.*
1846 BRYAN, RICHARD S., M.D., died March 5, 1860, æt. 64. Tr. '67, 156.
1871 BRYAN, WILLIAM J., M.D., died July 13, 1877, æt. 40. Tr. '78, 1122.
1854 BRYANT, CHAS. G., M.D., died July 12, 1864, æt. 35. Tr. '67, 156; '70, 645.
1855 BRYANT, JOEL, M.D. 1869.*
1867 BRYANT, MELVILLE, M.D., Brooklyn, N. Y. N. Y. Hom.. 1862.
1869 BUCK, JIRAH D., M.D., Cincinnati, Ohio. Clev. Hom., 1864.
1860 BUCKNER, CHARLES G., M.D., resigned 1875.
1885 BUDDEKE, IVO. W., M.D., Memphis, Tenn. Pulte, Cin., 1875.
1868 BUDLONG, JOHN CLARKE, M.D., Providence, R. I. Hom., Pa., 1863.
1873 BUFFUM, JOSEPH HOWARD, M.D., Chicago, Ill. N. Y. Hom., 1873.

1859 BULKLEY, WILLIAM E., M.D., died June 14, 1870, æt. 74. Tr. '74, 658.
1856 BULL, A. T., M.D. 1875.*
1887 BULLARD, JULIUS ARTHUR, M.D., Wilkesbarre, Pa. Hahn., Phil., 1872.
1867 BUMSTEAD, SAMUEL J., M.D., resigned 1878.
1879 BUNTING, HARRY M., M.D. 1885.*
1867 BUNTING, THOMAS C., M.D., resigned 1879.
1869 BURBANK, JAMES C., M.D. 1874.*
1878 BURCK, FRANK T., M.D. 1879.*
1868 BURCHARD, JEFFERSON GREGG, M.D., died Mch. 6, 1870, æt. 31. Tr. '70, 645.
1872 BURDICK, ALICE DEBAUN, M.D. 1877.*
1867 BURDICK, STEPHEN P., M.D., Oakland, Cal. L. I. Col., 1860.
1854 BURGHER, JOHN C., M.D., Pittsburgh, Pa. Hahn., Phil., 1854.
1848 BURKE, ABRAHAM C., M.D., died April 15, 1880, æt. 62. Tr. '80, 142.
1867 BURNETT, BENAJAH J., M.D. 1873.*
1874 BURNETT, WILLIAM W., M.D. 1879.*
1859 BURPEE, JOHN A., M.D., died November 10, 1887.
1859 BURR, CHARLES HARTWELL, M.D., died February 26, 1885. Tr. '85, 97.
1874 BURR, EZRA D., M.D., expelled 1875.
1886 BURRITT, ALICE, M.D., Oakland, Cal. N. Y. Med. Col. and Hospital for Women, 1879.
1846 BURRITT, A. H., M.D. 1869.*
1853 BURRITT, A. R., M.D. 1867.*
1883 BURROUGHS, AMELIA, M.D., Omaha, Nebraska. Clev. Hom., 1881.
1870 BUSHNELL, LAFAYETTE, M.D, died July 9, 1879, æt. 55. Tr. '80, 144.
1846 BUTE, GEORGE H., M.D. 1858.*
1875 BUTLER, CLARENCE WILLARD, M.D., Montclair, N. J. N. Y. Hom., 1872.
1877 BUTLER, JOHN, M.D., died April 10, 1885, æt. 41. Tr. '85, 100.
1873 BUTLER, WILLIAM MORRIS, M.D., Brooklyn, N. Y. Col. Phys. and Surg. N. Y., 1873.
1868 BUTMAN, GEORGE F., M.D. 1869.*
1871 CADMUS, JAMES M., M.D., died May 10th, 1879, æt. 45. Tr. '80, 145.
1853 CAIN, WILLIAM, M.D. 1867 *
1880 CAINE, WM. HARRIS, M.D., Stillwater, Mich. Hahn., Chicago, 1867.
1865 CALDWELL, S. N., M D. 1869.*
1868 CALVERT, WILLIAM J., M.D., 1885.*
1882 CAMP, ARTHUR A., M.D., died April 9th, 1888, æt. 33. Tr. '88, 232.
1881 CAMPBELL, ALICE BOOLE, M.D., Brooklyn, N. Y. N. Y. Wom. Coll., 1867.
1867 CAMPBELL, CHARLES E., M.D. 1881.*
1879 CAMPBELL, ELIZA A. LADD, M.D., Attleborough, Mass. Boston Univ., 1876.
1874 CAMPBELL, HOWARD S., M.D. 1874.*
1876 CAMPBELL, JAMES ALEXANDER, M.D., St. Louis, Mo. Hom., Mo., 1869.
1858 CAMPBELL, MELANCTHON W, M.D., Troy, N. Y. Clev. Hom., 1853.
1874 CAMPBELL, MERRETT B., M D. 1881.*
1886 CANDEE, J. WILLIS, M.D., Syracuse, N. Y. N. Y. Hom., 1878.
1873 CANFIELD, CORRESTA T., M.D., Chicago, Ill. Clev. Hom., 1872.
1881 CANNEY, F. E. JAMES, M.D., San Francisco, Cal. Hahn., Chicago, 1868.
1870 CAREY, HIRAM P., M.D. 1875.*
1874 CARMICHAEL, JAMES A., M.D. 1885.*

1883 CARMICHAEL, JOHN H., M.D., Springfield, Mass. Albany Med. Col., 1873.
1877 CARLTON, BURK, M.D. 1878.*
1875 CARLTON, EDMUND, JR., M.D., resigned 1879.
1869 CARPENTER, CHAS. H., M.D., died September 23d, 1883, æt. 58. Tr. '84, 666.
1870 CARPENTER, MOSES, M.D., died September 9th, 1872.
1870 CARR, MARVIN S., M D. 1876.*
1882 CARROLL, CHARLES W., M.D. 1885.*
1871 CARROLL, STEPHEN H., M.D. 1876 *
1873 CARTER, HIRAM W., M.D. 1873.*
1873 CARUTHERS, ROBERT EWING, M.D., died Jan. 5th, 1885, æt. 37. Tr. '85, 101.
1882 CARVILL, ALPHONSO HOLLAND, M.D., Somerville, Mass. Harvard, 1869.
1881 CASE, ERASTUS ELY, M.D., Hartford, Conn. N. Y. Hom., 1874.
1879 CASSEDAY, FRANK FISK, M.D., Kansas City, Mo. Hahn., Phila., 1879.
1854 CATE, SHADRACH M., M.D., resigned 1885.
1876 CATE, WILLIAM M., M.D., resigned 1885.
1844 CATOR, HARVEY HULL, M.D., died February 21st, 1882, æt. 67. Tr. '84, 652.
1867 CETLINSKI, BELOIT, M.D. 1872.*
1869 CHAMBERLAIN, CHARLES H., M.D. 1869.*
1859 CHAMBERLAIN, WM. BAKER, M.D., Worcester, Mass. Clev. Hom., 1854.
1866 CHANDLER, G. E., M.D. 1867.*
1844 CHANNING, WILLIAM, M.D., died 1854. Tr. '67, 156, '70, 646.
1873 CHANTLER, ISRAEL B., M.D. 1886.*
1875 CHAPMAN, MILLIE J., M.D., Pittsburgh, Pa. Clev. Hom., 1874.
1850 CHASE, DURFEE, M.D., deceased.
1868 CHASE, HENRY S. 1869.*
1847 CHASE, HIRAM LUCE, M.D., Cambridge, Mass. Harvard, 1846.
1876 CHASE, HERBERT AUGUSTUS, M.D., Toledo, O. Boston Univ., 1876.
1867 CHASE, ISRAEL P., M.D. 1867.*
1871 CHASE, MAURICE J., M.D., Galesburg, Ill.
1873 CHASE, SARAH B., M.D., resigned 1885.
1869 CHEEVER, DANIEL A., M.D. 1877.*
1870 CHENEY, BENJ. HICKS, M.D., New Haven, Conn. Louisiana Univ., 1861.
1846 CHILD, AMHERST, M.D., withdrew 1856.
1871 CHILD, NELSON N., M.D. 1885.*
1875 CHILDS, ORIN D., M.D. 1882.*
1865 CHILDS, WM. RIDDLE, M.D., Pittsburgh, Pa. Hahn., Phil., 1863.
1857 CHITTENDEN, GEORGE W., M.D. 1880.*
1871 CHURCH, CHARLES A., M.D., Passaic, N. J. N. Y. Hom., 1871.
1882 CHURCH, THOS. TEASDALE, M.D., Salem, O. Clev. Hom, 1882.
1859 CHURCH, WM. J., M.D., died Sept. 29th, 1862, æt. 35. Tr. '65, 109, '67, 156.
1873 CIGLIANO, TOMMASO, M.D., Naples, Italy. Corresponding.
1871 CLAPP, HERBERT C., M.D., resigned 1878.
1881 CLAPP, JAMES WILKINSON, M.D., Brookline, Mass. Boston Univ., 1877.
1886 CLARK, BYRON G., M.D., New York. Dartmouth Med. Col., 1877.
1880 CLARK, EDGAR WILLARD, M.D., resigned 1888.
1844 CLARK, ELIPHALET, M.D., died June 8th, 1883, æt. 82. Tr. '84, 650.
1888 CLARK, FRANK M., M.D., Salem, O. Clev. Hom., 1880.
1872 CLARK, J. J., M.D. 1877.*

1884 CLARK, JOSEPH NELSON, M.D., elected 1874. 1879.* Re-elected 1884, 1887.*
1850 CLARK, J. K., M.D. 1877.*
1859 CLARK, JOHN LEWIS, M.D., died October 25th, 1880, æt. 68. Tr. '81, 123.
1844 CLARK, PELEG, M.D., died January 1st, 1875, æt. 89. Tr. '75, 792.
1844 CLARK, LUTHER, M D., died September 26th, 1884, æt. 74. Tr. '85, 87.
1887 CLARK, LYMAN ARTHUR, M.D., Cambridge, N. Y. N. Y. Hom., 1869.
1854 CLARKE, HENRY BRADFORD, M.D., died 1888, æt. 60. Tr. '88, 219.
1888 CLARKE, HENRY L., M.D., New Bedford, Mass. Boston Univ., 1884.
1854 CLARKE, WM. BRADLEY, M.D., Indianapolis, Ind. Chicago Hom., 1884.
1847 CLARY, LYMAN, M.D., died June 1st, 1876, æt. 73. Tr. '77, 977.
1882 CLAUDE, A., M.D., Paris, France. Corresponding.
1860 CLAY, GEORGE B. L., M.D. 1876.*
1887 CLAYPOOL, ALBERT, M.D., Toledo, O. N. Y. Hom., 1876.
1869 CLECKLEY, MARSDEN A., M.D. 1869.*
1852 CLEMENTS, ZINA, M.D. 1871.*
1886 CLEMMER, F. O., M.D. 1886.*
1883 CLEVELAND, CHAS. LUTHER, M.D., Cleveland, O. Hom., Clev., 1883.
1867 CLEVELAND, WILLIAM L., M.D., died May 20th, 1876, æt. 67. Tr. '77, 996.
1876 CLIFTON, ARTHUR C., M.D., Northampton, Eng. Corresponding.
1888 CLOSSON, JAMES H., M.D., Philadelphia, Pa. Hahn., Phila., 1888.
1869 CLOUD, CHARLES R., M.D., deceased.
1869 CLOUD, J. A., M.D. 1877.*
1869 COBURN, EDWARD S., M.D., Troy, N. Y. N. Y. Hom., 1864.
1874 . COBURN, JESSE MILTON, M.D. 1879.*
1869 COCHRAN, CHARLES A., M.D., Winthrop, Me. Bowdoin, 1856.
1865 COFFREN, J. Q. A., M.D. 1881.*
1866 COGSWELL, C. HERBERT, M.D., Cedar Rapids, Ia. Hahn., Chicago, 1866.
1870 COLBURN, S. H., M.D. 1885.*
1871 COLBY, EDWARD P., M.D. 1876.*
1886 COLBY, EDWIN ALONZO, M D., Gardner, Mass. Boston Univ., 1876.
1847 COLBY, ISAAC, M D., died June 29th, 1866, æt. 73. Tr. '67, 156.
1883 COLE, DIRECTUS DEFORREST, M.D., Morrisville, N. Y. Hahn., Chicago, 1881.
1870 COLE, EDGAR B., M.D., died November 10th, 1871, æt. 45. Tr. '74, 660.
1883 COLE, ELLSWORTH ZINA, M.D., Michigan City, Ind. Hahn., Chicago, 1879.
1850 COLE, HARVEY, M.D. 1867.*
1871 COLE, HARLEM P., M.D. 1877.*
1869 COLE, S. P., M.D. 1878.*
1881 COLLINS, CHAS. SUMNER, M D. 1885.*
1851 COLLINS, H. A., M.D., deceased. Tr. '84, 35.
1857 COLTON, D. ALPHONSO, M.D. 1875.*
1869 COLTON, GEORGE, M.D. 1869.*
1874 COLTON, HENRY ELDRIDGE, M.D., Buffalo, N. Y. Clev. Hom., 1872.
1855 COMAN, I. W., M.D. 1867.*
1869 COMPTON, JOSHUA AUGUSTINE, M.D., Indianapolis, Ind. Clev. Hom., 1866.
1867 COMSTOCK, ALBERT LEE, M.D., deceased.
1866 COMSTOCK, THOS. GRISWOLD, M.D., St. Louis, Mo. Hahn., Phila., 1851.
1874 CONANT, CLARENCE M., M.D. 1887.*
1876 CONANT, THOMAS, M D., Gloucester, Mass. Harvard Med., 1868.

1875 CONNOR, DELANIA T., M.D., deceased.
1848 COOK, ABIJAH PERKINS, M.D., died Sept. 23d, 1884, æt. 76. Tr. '85, 88.
1869 COOK, CHARLES P., M.D. 1886.*
1857 COOK, ELIHU GEORGE, M.D., New York. Clev. Hom., 1862.
1867 COOK, ELLIOTT L., M.D. 1874.*
1844 COOK, GEORGE W., M.D., died October 1, 1849, æt. 43. Tr. '67, 156.
1881 COOK, JOSEPH W., M.D., Buffalo, N. Y. Clev. Hom., 1881.
1850 COOK, SIMEON A., M.D., died March 9th, 1873, æt. 70. Tr. '74, 653.
1872 COOK, SUSAN S., M.D., resigned 1881.
1854 COOKE, NICHOLAS FRANCIS, M D., deceased. Tr. '85, 112.
1886 COOKE, PERSIFOR MARSDEN, M.D, Bethlehem, Pa. Hahn., Phil., 1886.
1866 COOKE, WILLIAM H., M.D., died March 21st, 1879, æt. 50. Tr. '79, 1247.
1874 COON, HENRY CLARKE, M.D, Alfred Centre, N. Y. N. Y. Hom., 1872.
1876 COOPER, CLARK J., M.D., 1881.*
1866 COOPER, FRANK, M.D., 1877.*
1866 COOPER, JOHN F., M.D., Allegheny City, Pa. Hahn., Phil., 1853.
1888 COOPER, PETER, M.D., Wilmington, Del. Hahn., Phil., 1881.
1884 COOPER, WILLIAM D., M.D., Wayne, Mich. Mich. Univ., 1883.
1874 CORBIN, JOHN L., M.D., Athens, Pa. Hahn., Chic., 1874.
1869 CORCORAN, LUKE, M.D., 1881.*
1888 CORNELL, ALBERT B., M.D., Kalamazoo, Mich. Hahn., Phil., 1869.
1850 CORNELL, BENJAMIN F., M.D., died May 12th, 1881, æt. 76.
1873 COSSART, ARTHUR B., M.D. N. Y. Hom., 1869.
1856 COTÉ, MARCELLIN, M.D., died May 29th, 1878, æt. 63. Tr. '78, 1119.
1877 COUCH, ASA S., M.D., Fredonia, N. Y. Hom. Penn., 1855.
1876 COUCH, LOUIS BRADFORD, M.D., Nyack, N. Y. N. Y. Hom., 1874.
1853 COULES, E. W., M.D., 1867.*
1853 COULTER, JAMES HERVEY, M.D., 1867.*
1869 COVERT, NELSON B., M.D., 1881.*
1871 COVERT, RYNEAR B., M.D., 1882.*
1883 COWL, WALTER YEOMANS, M.D., New York. N. Y. Hom., 1877.
1865 COWLEY, DAVID, M.D., died October, 1886, æt. 56. Tr. '67, 211.
1875 COWPERTHWAITE, ALLEN CORSON, M.D., Iowa City, Ia. Hahn., Phil., 1869.
1847 COX, GEORGE, M.D., died November 11th, 1853, æt. 58. Tr. '67, 159.
1871 COX, GEORGE HOWELL, M.D., 1876.*
1854 COX, JAMES WILLIAM, M.D., Albany, N. Y. Albany Med., 1852.
1852 COXE, JOHN REDMAN, JR., M.D., died May 11th, 1863, æt. 65.
1858 COXE, LORENZO LEWIS, JR., M.D., died Nov. 28th, 1866, æt. 29. Tr. '68, 285.
1867 CRAIG, JAMES D., M.D., 1876.*
1869 CRAGIN, FRANK M., M.D., Norwood, Mass. Hahn., Phil., 1860.
1878 CRANCH, EDWARD, M.D., Erie, Pa. N. Y. Hom., 1875.
1886 CRANDALL, EDWARD L., M.D., Troy, N. Y. Albany Med., 1881.
1874 CRANK, CHARLES DAKE, M.D., Cincinnati, O. Hahn., Phil., 1871.
1885 CRARY, C. W., M.D., Chicago, Ill. Jefferson Med., 1870.
1872 CRATER, HENRY, M.D., died May 1st, 1886, æt. 50. Tr. '86, 143.
1883 CRAWFORD, ALEXANDER K., M.D., Chicago, Ill. Hahn., Chic., 1880.
1883 CRAWFORD, JOHN MARTIN, M.D., Cincinnati, O. Pulte, Cinn., 1877.
1875 CRAWFORD, JOHN S., M.D., 1879.*

1885 CRIPPEN, H. H., M.D., San Diego, Cal. Clev. Hom., 1884.
1869 CRISPELL, GARRETT D., M.D., died Dec. 15th, 1880, æt. 79. Tr. '81, 124.
1846 CRITTENDEN, J., M.D., died (?). Tr. '67, 157.
1846 CRITTENDEN, W. H., M.D., 1867.*
1852 CROCKER, ISAAC SENTER, M.D., died Oct. 26th, 1866, æt. 38. Tr. '67, 157.
1876 CROCKET, FREDERICK E., M.D., 1882.*
1865 CROPPER, CHARLES, M.D., 1878.*
1846 CROSBY, ELIAKIM, M.D., died Sept. 2d, 1854, æt. 70. Tr. '67, 157; '68, 285.
1885 CROSBY, GEORGE W., M.D., Atlantic City, N. J. N. Y. Hom., 1878.
1876 CROSBY, OBED H., M.D., died January 6th, 1885, æt. 35. Tr. '85, 103.
1869 CROSS, HIRAM B., M.D., Jamaica Plain, Mass. Clev. Hom., 1866.
1875 CROSS, LESTER E., M.D., Stockton, Cal. Hom. Mo., 1873.
1869 CROSS, WILLIAM PLUMMER, M.D., South Boston, Mass. Clev. Hom., 1853.
1872 CROWELL, LEWIS C., M.D., 1872.*
1887 CROWLEY, ADDIE E., M.D., Geneva, N. Y. Clev. Hom., 1886.
1888 CRUMPTON, MARGARET L., M.D., Allegheny City, Pa. N. Y. Med. Col. Wom., 1887.
1859 CULLIS, CHARLES, M.D., Boston, Mass. Vermont Univ., 1857.
1886 CULVER, JANE KENDRICK, M.D., Boston, Mass. Boston Univ., 1879.
1859 CUMMINGS, E. P., M.D., 1867.*
1848 CUMMINGS, JAMES MERRILL, M.D., died July 20th, 1883, æt. 73. Tr. '85, 90.
1881 CUMMINGS, MARIA LOUISA, M.D., Boston Highlands, Mass. Boston Univ., 1879.
1867 CURRIER, CHRISTOPHER B., M.D., San Francisco, Cal. Penn. Univ., 1862.
1870 CURTIS, DAVID G., M.D., 1875.*
1883 CURTIS, ELLIOTT D., M.D., Woodland, Cal. Hahn., Chic., 1883.
1876 CURTIS, JOHN MITCHELL, M.D., 1885.*
1871 CURTIS, JOHN W., M.D., 1872.*
1869 CURTIS, RINALDO J., M.D., 1869.* Re-elected 1874, 1881.*
1878 CUSHING, CHARLES F., M.D., 1883.*
1881 CUSHING, EUGENE B., M.D., 1872.*
1867 CUSHING, ALVAN MATTHEW, M.D., Springfield, Mass. Hahn., Phil., 1856.
1860 CUSHING, JAMES F., M.D., 1872.*
1851 CUSHING, JOHN J., M.D., 1867.*
1879 CUSTIS, JAMES BAYARD GREGG, M.D., Washington, D.C. N. Y. Hom. 1878.
1869 CUTLER, WILLIAM C., M.D., Chelsea, Mass.
1866 DAKE, BENJAMIN FRANKLIN, M.D., Pittsburgh, Pa. Clev. Hom, 1862.
1881 DAKE, CHARLES, M.D., Hot Springs, Ark. Univ. of Tenn., 1881.
1855 DAKE, CHARLES ALONZO, M.D., 1872.*
1847 DAKE, CHAUNCEY M., M.D., died July 15th, 1872.
1873 DAKE, CHARLES R., M.D., 1873.*
1847 DAKE, DAVID M., M.D, 1868.*
1887 DAKE, FRANK BORLAND, M.D., Nashville, Tenn. Univ. of Tenn., 1887.
1852 DAKE, JABEZ P., M.D., Nashville, Tenn. Hahn., Phil., 1851.
1879 DAKE, JABEZ PERCY, JR., M.D., died Nov. 14, 1886, æt. 29. Tr. '87, 212.
1860 DAKE, JABEZ W., M.D., 1872.*
1854 DAKE, WILLIAM HENRY, M.D., 1867.*
1877 DAKE, WALTER M., M.D, Nashville, Tenn. Hahn., Phil., 1877.

1872 DAKE, WILLIAM CHURCH, M.D., Nashville, Tenn. Nashville Univ., 1872.
1880 DALE, HARVEY B., M.D., 1880.*
1879 DANFORTH, LOOMIS LEGRAND, M.D., New York. Col. Phys. and Surg., N. Y., 1874.
1870 DANFORTH, WILLIS, M.D., Milwaukee, Wis. Rock Island Med., 1849.
1854 DARLING, CHARLES B., M.D., died June 10th, 1860, æt. 41. Tr. '67, 157.
1874 DARLING, HENRY HUBBARD, M.D., Keene, N. H. N. Y. Hom., 1861.
1886 DARLING, WILLIAM W., M.D., Newport, N. H. Dartmouth Col., 1860.
1875 DART, GEORGE, M.D., San Francisco, Cal. Detroit Hom., 1875.
1875 DART, JAMES M., M.D., 1875.*
1883 DAVIS, EDWARD EVERETT, M.D., Philadelphia, Pa. Hahn., Phil., 1881.
1868 DAVIS, F. A. W., M.D., 1869.*
1875 DAVIS, FIELDING L., M.D., Evansville, Ind. Clev. Hom., 1870.
1878 DAVIS, JOHN E. L, M.D., Nyack, N. Y. N. Y. Hom., 1877.
1871 DAVIS, WILLIAM BEESLY, M.D., died March 7th, 1886, æt. 66. Tr. '86, 141.
1868 DAYFOOT, HERBERT M., M.D., Rochester, N. Y. Clev. Hom., 1867.
1887 DEADY, CHARLES, M.D., New York. N. Y. Hom., 1876.
1881 DEAN, EDWARD W., M.D., Braddock, Pa. Hahn., Phil., 1875.
1869 DEDERKEY, FRANCIS F., M.D., San Francisco, Cal. Hahn., Chic., 1881.
1888 DEETRICK, JOHN, M.D., Youngstown, O. Hom., Mo., 1875.
1888 DEFENDORF, JOHN J., M.D., Williamston, Mo. Detroit Hom., 1873.
1859 DEGERSDORF, ERNST BRUNO, M.D., died June 28th, 1883, æt. 63. Tr. '84, 656.
1874 DELAMATER, NICHOLAS B., M.D. 1881.*
1881 DELAP, SILAS C., M.D. 1887.*
1869 DELAVAN, J. SAVAGE, M.D., died August 7th, 1885, æt. 45.
1881 DEMAREST, JOHN H., M.D. N. Y. Hom., 1865.
1851 DENISON, JEREMIAH T., M.D., died April 25th, 1879. Tr. '79, 1235.
1859 DENNETT, GEORGE WILLIAM, M.D. 1872.*
1880 DENNINGER, PAUL G., M.D., 1880.*
1869 DENNIS, LABAN, M.D., Newark, N. J. N. Y. Col. Phys. and Surgs., 1866.
1878 DERBY, FRANCES JANNEY, M.D., Columbus, O. Boston Univ., 1877.
1875 DESCHERE, MARTIN, M.D., New York. N. Y. Hom., 1875.
1846 DETWILLER, HENRY, M.D., died April 21st, 1866, æt. 91. Tr. '87, 193.
1858 DETWILLER, JOHN JACOB, M.D., Easton, Pa. Penn. Univ., 1854.
1873 DETWILLER, WILLIAM M., M.D., died April, 1887.
1847 DEWOLF, JOHN J., M.D., resigned 1873.
1884 DICKINSON, WILMOT HORTON, M.D., Des Moines, Iowa. Clev. Hom., 1858.
1883 DILLOW, GEORGE MORRIS, M.D., New York. N. Y. Phys. and Surgs., 1875.
1887 DILLS, MALCOLM, M.D., Carlisle, Pa. Ohio Med. Col., Cincinnati, O., 1871.
1884 DINSMORE, CHARLES M., M.D. 1887.*
1858 DINSMORE, J. PITMAN. 1878.*
1878 DINSMORE, SAMUEL W. SCOTT, M.D., Sharpsburg, Pa. Hahn., Phil., 1876.
1876 DIXON, GEORGE MERRITT, M.D. 1887.*
1870 DOANE, WILLIAM C., M.D. 1871.*
1887 DOCKING, THOMAS, M.D., San Diego, Cal. M. R. C. S, Eng., 1866.
1852 DODGE, LEWIS, M.D. 1868.*
1847 DODGE, MOSES, M.D., died October 18th, 1879, æt. 67. Tr. '81, 122.
1875 DODGE, RODOLPH LORENZO, M.D. 1882.*

1883 DODS, A. WILSON, M.D., Silver Creek, N. Y. Hahn., Chicago, 1878.
1885 DONALD, ALEXANDER, M.D., Stillwater, Mich. Hahn., Chicago, 1880.
1880 DONALDSON, SAMUEL J., M.D., New York. Jefferson Col., Phil., 1870.
1848 DONOVAN, THOMAS W., M.D. New Brighton, N. Y.
1875 DOOLITTLE, EGBERT D., M.D. 1884.*
1868 DORAN, CHARLES RONEY, M.D. 1887.*
1869 DORION, CHARLES N., M.D. 1882.*
1869 DOTY, HYLON, M.D., died May 5th, 1876, æt. 58.
1872 DOUGHTY, FRANCIS E, M.D., New York. N.Y. Col. Phys. and Surgs., 1859.
1847 DOUGLAS, JAMES S., M.D., died August, 1878, æt. 77. Tr. '79, 1236.
1881 DOUGLASS, MILFORD EUGENE, M.D., Danville, Va. Hahn., Phil., 1880.
1887 DOWLING, GEORGE BUTMAN, M.D., Orange, N. J. N. Y. Hom., 1886.
1867 DOWLING, JOHN WILLIAM, M.D., New York. Hahn., Phil., 1857.
1887 DOWLING, JOHN WILLIAM, JR., M.D., New York. N. Y. Hom., 1886.
1882 DOWNEY, FINDLEY EDGAR, M.D., Clinton, Ill. Pulte, Cin., 1879.
1867 DRAKE, ELIJAH H., M.D., died November 16th, 1874. Tr. '75, 804.
1875 DRAKE, HARLOW B., M.D. 1887.*
1883 DRAKE, J. CLINTON, M.D. 1887.*
1871 DRAKE, JASON W., M.D., died Nov. 20th, 1885, æt. 47. Tr. '88, 235.
1871 DRAKE, OWEN MILTON, M.D., Ellsworth, Me. Hahn., Phil., 1870.
1871 DREHER, CHARLES B., M.D. 1882.*
1871 DREIBILBIS, DAVID L., M.D., died March 24th, 1872.
1855 DRIGGS, HIRAM C., M.D. 1868.*
1877 DRYSDALE, J. J., M.D., Liverpool, Eng. Honorary.
1845 DUBS, SAMUEL R., M.D., Doylestown, Pa. Penn. Univ., 1836.
1876 DUDGEON, R. E., M.D., London, Eng. Honorary.
1869 DUDLEY, PEMBERTON, Philadelphia, Pa. Hom. Med., Penna., 1861.
1852 DUFFIELD, HENRY, M.D., died December 5th, 1865, æt. 64. Tr. '66, 155; '67, 157.
1884 DU FOUR, WILLIAM MORGAN, M.D., Williamsport, Pa. Hahn., Phil., 1880.
1866 DUNCAN, THOMAS CATION, M.D., Chicago, Ill. Hahn., Chicago, 1866.
1860 DUNHAM, CARROLL, M.D., died February 18th, 1877, æt. 49. Tr. '77, 967.
1881 DUNLEVY, SUZETTA EHRMANN, M.D., Brooklyn, N. Y. Hom., Mo., 1879.
1874 DUNN, J. L., M.D. 1885.*
1886 DUNN, WESLEY A., M.D. 1886.*
1844 DUNNELL, HENRY G., M.D., died September 4th, 1868, æt. 64. Tr. '70, 631.
1873 DUNNING, JULIA ADAMS, M.D. 1877.*
1886 DUNNING, THOMAS S., M.D., Philadelphia, Pa. Hahn., Phil, 1870.
1846 DUTCHER, BENJAMIN C., M.D. 1867.*
1866 EARHART, J. R., M.D., Philadelphia, Pa. Hahn., Phil., 1855.
1881 EASTMAN, ARTHUR M., M.D., St. Paul, Minn. Hahn., Phil., 1879.
1881 EASTMAN, ELLEN LOUISE, M.D. 1882.*
1877 EASTMAN, FRANK, M.D. 1881.*
1859 EATON, HOSEA BALLOU, M.D., died April 19th, 1887, æt. 65. Tr. '87, 200.
1877 EATON, J. ALBRO, M.D., Brooklyn, N. Y. Pulte, Cin., 1876.
1880 EATON, MORTON MONROE, M.D., Cincinnati, O. Rush Med. Col., Chicago, 1861.
1876 ECKEL, JOHN NICOLEIUS, M.D., San Francisco, Cal. St. Louis Hom., 1879.

1874 EDDY, HIRAM L., M.D. 1878.*
1869 EDIC, JOHN J., M.D. 1874.*
1874 EDMUNDS, WILLIAM ALEXANDER, M.D., St. Louis, Mo. Louisville Med. Institute, 1846.
1871 EDMUNDSON, WALTER F., M.D., Pittsburgh, Pa. Hahn., Phil., 1871.
1872 EDSON, SUSAN ANN, M.D., Washington, D. C. Clev. Hom., 1854.
1868 EGGERT, WILLIAM, M.D. 1882.*
1885 EHRINGER, GEORGE ERNEST, M.D., Keokuk, Iowa. Med. Dep. Clev. Hud. West. Res., 1853.
1846 EHRMAN, BENJAMIN, M.D., died March 15th, 1886, æt. 74. Tr. '86, 121.
1846 EHRMAN, FREDERICK G., M.D., Cincinnati, O. Tübingen Univ. and Allentown Acad., 1845.
1865 EHRMANN, ALBERT H., M.D. 1874.*
1849 EHRMANN, CHRISTIAN, M.D. 1871.*
1869 EHRMANN, LOUIS P., M.D. 1874.*
1873 ELDRIDGE, C. S., M.D. 1879.*
1873 ELDRIDGE, ISAAC N., M.D. 1877.*
1869 ELLIOTT, JOSEPH BAILEY, M.D., Brooklyn, N. Y. Yale Med. Dep., 1853.
1876 ELLIOTT, LEVI W., M.D. 1882.*
1857 ELLIS, JOHN, M.D. 1877.*
1877 ELY, CHARLES T., M.D. 1877.*
1883 ENLOE, JAMES HENRY, M.D., Nashville, Tenn. Mich. Univ., 1879.
1876 ENLOE, THOMAS E., M.D. 1882.*
1882 ENOS, CHARLES W., M.D., Jerseyville, Ill. Hom., Mo., 1874.
1873 ENSIGN, JENNIE, M.D., New York. Eclect., N. Y., 1871.
1867 ERMENTRAUT, JOHN P., M.D., New York. N. Y. Hom., 1863.
1846 ESREY, WILLIAM P., M.D., died September 28th, 1854, æt. 39. Tr. '67, 157.
1872 ESTEN, JOHN, M.D. 1876.*
1874 EVANS, ALBERT JOB, M.D., Fredonia, N. Y. Hahn., Phil., 1871.
1870 EVANS, C. HORACE, M.D. 1876.*
1867 EVANS, JOSEPH T., M.D., deceased.
1875 EVERETT, AMBROSE S., M.D., Denver, Col. St. Louis Hom. Phys. and Surg., 1870.
1872 EVERETT, MARY H., M.D. 1881.*
1867 EVERETT, DANIEL L., M.D. 1872.*
1871 FAGER, CHARLES BUFFINGTON, M.D, Harrisburg, Pa. Penn. Univ., 1864.
1881 FAGER, JOHN H., M.D. 1887.*
1882 FAHNESTOCK, C. S., M.D. 1886.*
1882 FAHNSTOCK, JOSEPH C., M.D., Piqua, O. N. Y. Hom., 1882.
1870 FAIRBANKS, CHARLES D., M.D. 1878.*
1867 FAIRBANKS, JOHN N., M.D., died 1871.
1844 FAIRCHILD, STEPHEN, M.D. 1867.*
1879 FALLIGANT, LOUIS ALEXANDER, M.D., Savannah, Ga. Hom. Penn., 1858.
1867 FANNING, THOMAS COIT, M.D. 1886.*
1859 FARNSWORTH, CHAS. HENRY, M.D., Cambridge, Mass. N. Y. Univ., 1847.
1872 FARRINGTON, ERNEST ALBERT, M.D., died December 17th, 1885, æt. 38. Tr. '86, 134.
1866 FAULKNER, ROBERT, M.D., resigned 1877.

1887 FAUST, LOUIS, Schenectady, N. Y. N. Y. Hom., 1877.
1887 FAY, CHARLOTTE HOOKER, M.D., Springfield, Mass. Wom. Med. Phil., 1883.
1886 FELCH, ALBERT H., M.D., Minneapolis, Minn. Hahn., Phil., 1876.
1876 FELLGER, ADOLPHUS, M.D., died July 19th, 1888, æt. 67.
1867 FELLOWS, HENRY BARTON, M D., Chicago, Ill. Clev. Hom., 1861.
1871 FETTERHOFF, HIRAM R., M.D. 1883.*
1868 FINCH, EDWIN WARD, M.D., New Rochelle, N. Y. N. Y. Hom., 1868.
1855 FINCKE, FRED. MAX BERNHARDT, M.D., Brooklyn, N.Y. N.Y. Univ., 1854.
1888 FINNEY, EVERETT B., M.D., Philadelphia, Pa. Hahn., Phil., 1888.
1867 FISH, CHARLES FRED., M.D., died February 25th, 1875, æt. 54. Tr. '75, 803.
1873 FISH, EVERETT W., M.D. 1873.*
1873 FISHER, ALBERT LEROY, M.D., Elkhart, Ind. Hahn., Phil., 1871.
1884 FISHER, CHARLES EDMUND, M.D., Austin, Tex. Pulte, Cin., 1875.
1867 FISKE, WILLIAM L. M., M.D., Brooklyn, N.Y. N.Y. Bellevue Med., 1863.
1844 FLAGG, JOSIAH FOSTER, M.D., died December 20th, 1853, æt. 64. Tr. '54, 70; '67, 157.
1867 FLAGG, LEVI WELLS, M.D., died May 15th, 1884, æt. 67. Tr. '84, 35.
1869 FLANDERS, DAVID P., M.D, Belfast, Me. Harvard, 1857.
1879 FLANDERS, MARTHA J., M.D., Lynn, Mass. N. E. Fem. Med., 1861.
1884 FLEMING, RICHARD K., M.D., Pittsburgh, Pa. Hahn., Phil., 1882.
1869 FLETCHER, WILLIAM K., M.D., resigned 1874.
1859 FLOTO, HERMAN, M.D. 1869.*
1870 FLOWERS, JOAB R., M.D., Columbus, O. Clev. Hom., 1861.
1851 FOOTE, CHARLES CHEENEY, M.D., died Nov. 9th, 1871, æt. 46. Tr. '73, 509.
1850 FOOTE, ELIAL T., M.D., died November 17th, 1877, æt. 81.
1850 FOOTE, GEORGE FRANKLIN, M.D. N. Y. Univ., 1848.
1869 FOOTE, GEORGE W., M.D. 1874.*
1874 FORBES, GEORGE FOSTER, M.D., West Brookfield, Mass. Boston Univ., 1874.
1875 FORD, JULIA, M.D. 1879.*
1881 FOSS, DAVID, M.D., Newburyport, Mass. Berkshire, 1861.
1869 FOSTER, EDWARD, M.D. 1874.*
1869 FOSTER, AVERY B., M.D., died December 17th, 1885, æt. 55.
1875 FOSTER, FRED H., M.D. 1875.*
1866 FOSTER, GEORGE S., M.D., deceased. Tr. '68, 285.
1869 FOSTER, JAMES W., M D. 1869.*
1882 FOSTER, JOHN M., M.D. 1887.*
1880 FOSTER, RICHARD NORMAN, M.D., Chicago, Ill., elected 1870. Hahn., Chicago, 1869.
1867 FOSTER, WILLIAM DAVIS, M.D., Kansas City, Mo. Hom. Mo., 1869.
1888 FOWLER, DEWITT C., M.D, Aberdeen, D. T. N. Y. Phys. and Surg., 1863.
1869 FOWLER, EDWARD PAYSON, M.D., resigned 1885.
1860 FOX, JOHN W., M.D. 1872.*
1882 FOX, HARRIET M., M.D. 1805.*
1867 FRANKLIN, EDWARD C., M.D., died Dec. 10th, 1885, æt. 63. Tr. '86, 130.
1885 FRANKLIN, NATHANIEL LYON, M.D., died February, 1885. Tr. '86, 132.
1877 FRANTZ, JACOB T, M.D. 1877.*
1874 FRANTZ, ALBERT J., M.D. 1881.*
1873 FRASIER, JEROME B., M.D. 1881.*

1875 FRAZER, EDWARD JOSEPH, M.D., San Francisco, Cal. Hahn., Chic., 1864.
1869 FREELAND, JAMES CHESTER, M.D., died April 23d, 1871, æt. 40.
1846 FREEMAN, ALFRED, M.D., died March 8th, 1861, æt. 67. Tr. '67, 157.
1887 FREEMAN, ELISHA R., M.D., Wapakoneta, O. Pulte Cin., 1883.
1858 FREEMAN, WARREN, M.D., died April 5th, 1880, æt. 65. Tr. '80, 146.
1860 FREEMAN, WILLIAM E., M.D., died February, 1879, æt. 63. Tr. '81, 130.
1881 FREEMAN, WILLIAM W., M.D. 1884.*
1886 FREER, JAMES A., M.D., Washington, D. C. N. Y. Hom., 1885.
1858 FRELIGH, MARTIN, M.D., New York. Hom., Penn., 1858.
1869 FRENCH, ARTHUR J., M.D. 1874.*
1880 FRENCH, BENJAMIN F., M.D. 1882.*
1871 FRENCH, HARRIET S., M.D., Philadelphia, Pa. Penn. Med. Univ., 1864.
1875 FRENCH, HAYES CLIFTON, M.D, San Francisco, Cal. Mich. Univ., 1865.
1882 FRENCH, JAMES C., M.D. 1885.*
1844 FREYTAG, EBERHARD, M.D., died March 14th, 1846, æt. 82. Tr. '67, 157.
1866 FRIESE, MICHAEL, M.D., died February 4th, 1880, æt. 48. Tr. '81, 147.
1874 FROST, HENRY C., M.D. 1874.*
1865 FROST, JAMES H. P., M.D., died January 21st, 1875, æt. 50. Tr. '75, 801.
1872 FRYE, MOSES M., M.D. 1885.*
1885 FULLER, CHARLES GORDON, M.D., Chicago, Ill. Chic. Hom., 1880.
1874 FULLER, EDWARD E., M.D. 1879.*
1869 FULLER, HIRAM E., M.D. 1873.*
1865 FULLER, JAMES M., M.D. 1873.*
1846 FULLER, MILTON, M.D., died March 11th, 1885, æt. 86. Tr. '85, 91.
1858 FULLGRAFF, OTTO, M.D., New York. N. Y. Univ., 1854.
1886 FULTON, FRED. SAMUEL, M.D., New York. Hom., 1885.
1874 FULTON, HENRY W., M.D., Pittsburgh, Pa. Hahn., Phil., 1872.
1886 GALE, CHARLES ALSON, M.D., Rutland, Vt. Hahn., Phil., 1880.
1869 GALE, J. A., M.D. 1878.*
1859 GALE, STEPHEN MADISON, M.D., died Jan. 22d, 1882, æt. 73. Tr. '82, 140.
1868 GALLINGER, JACOB H., M.D 1880.*
1848 GALLUPE, WILLIAM, M.D., died February 13th, 1883, æt. 78. Tr. '83, 148.
1851 GAMBELL, WILLARD PARKMAN, M.D., died December 1st, 1887, æt. 67. Tr. '88, 219.
1871 GARBERICH, E. W., M.D, Des Moines, Iowa. Penn. Univ., 1865.
1849 GARDINER, DANIEL R., M.D., Woodbury, N. J. Hahn., Phil., 1849.
1870 GARDINER, DAVID E., M.D. 1875.*
1846 GARDINER, RICHARD, M.D., died March 22d, 1877, æt. 84. Tr. '77, 969.
1846 GARDINER, WILLIAM A., M.D., died April 29th, 1863, æt. 39. Tr. '65, 108; '67, 157.
1884 GARDNER, FRANKLIN A., M.D., Washington, D.C. N. Y. Hom., 1882.
1857 GARDNER, FRANCIS B, M.D. 1868.*
1869 GARDNER, MARCELLOS M., M.D, died July 31st, 1880, æt. 49. Tr. '81, 133.
1853 GARRETSON, JESSE, M.D. 1867.*
1865 GARSIDE, WILLIAM BRIGGS, M.D., resigned 1888.
1868 GARVIN, J. PAUL, M.D. 1869.*
1852 GATCHELL, HORATIO P., M.D., resigned 1856.
1860 GAUSE, OWEN BEVERLY, M.D., Aiken, S. C. Hahn., Phil., 1857.
1873 GAYLORD, EDWARD P., M.D. 1885.*

1859 GEARY, JOHN FITZ GIBBON, M.D., deceased.
1885 GEE, WILLIAM S., M.D., Hyde Park, Ill. Hahn., Chic., 1881.
1881 GEISER, SAMUEL R., M.D., Cincinnati, O. Pulte, Cin., 1875.
1847 GEIST, CHRISTIAN FREDERICK, M.D., died August 27th, 1872, æt. 67. Tr. '74, 649.
1880 GENTRY, WILLIAM D., M.D. 1884.*
1882 GEORGE, JESSE D., M.D., Franklin, Ind. Hom., Clev., 1880.
1877 GEPPERT, JAMES P., M.D. 1885.*
1876 GERSTEL, ADOLPHUS, M.D., Vienna, Austria. Honorary.
1878 GETZE GEORGE M., M.D. 1883.*
1869 GIFFORD, GILBERT L., M.D., Hamilton, N. Y. Hahn., Phil., 1863.
1879 GIFFORD, WILLIS B., M.D., Attica, N. Y. Buffalo Univ., 1879.
1888 GILBERT, CHARLES B., M.D., Washington, D. C. Hahn., Phil., 1876.
1882 GILBERT, CHARLES H., M.D. 1885.*
1846 GILBERT, JAMES B., M.D., died 1854. Tr. '67, 157.
1872 GILCHRIST, JAMES G., M.D. 1881.*
1857 GILES, ALBERT, M.D., died June 7th, 1862, æt. 53. Tr. '67, 157.
1882 GILMAN, JOHN E., M.D., Chicago, Ill. Hahn., Chic., 1871.
1880 GIVEN, ADAM, M.D., Louisville, Ky. Chic. Hom., 1864.
1869 GOEDECKE, L., M.D. 1876.*
1887 GOODING, EMMA JEANETTE, M.D., Boston, Mass. Boston Univ., 1877.
1885 GOODMAN, CHARLES HOLMES, M.D., St. Louis, Mo. Hahn., Phil., 1869.
1887 GOODNO, WILLIAM COLBY, M.D., Philadelphia, Pa. Hahn., Phil., 1870. Elected 1871, 1872.*
1869 GOODWIN, EDWARD M., M.D. 1869.*
1867 GOODWIN, THOMAS SHEPARD, M.D., deceased.
1870 GORDON, GEORGE A., M.D., Sandusky, O. Clev. Hom , 1870.
1876 GORDON, PETER ALBERT, M.D., Flemingsburg, Ky. N. Y. Hom., 1868.
1883 GORHAM, GEORGE ELMER, M.D., Albany, N. Y. Hahn., Chic., 1874.
1844 GOSEWISCH, JOHN CHARLES, M.D., died May 11th, 1854, æt. 46. Tr. '54, 74; '67, 157.
1885 GOTTSCHALCK, WILLIAM VON, JR., M.D., Central Falls, R. I. Boston Univ., 1877.
1869 GOTTSCHALCK, WILLIAM VON, M.D., Providence, R. I.
1872 GOUCHER, E. T., M.D. 1878.*
1886 GRADY, MARY ELIZABETH, M.D., Philadelphia, Pa. N. Y. Hom., 1884.
1882 GRAHAM, DAVID M., M D. 1888.*
1870 GRAHAM, ELISHA B., M.D. 1878.*
1866 GRAHAM, W. G., M.D. 1872.*
1869 GRAMM, GUSTAVUS E., M.D., Philadelphia, Pa. Hahn., Phil., 1867.
1871 GRANT, BENJAMIN FRANKLIN, M.D. 1879.*
1867 GRASMUCK, LEWIS, M.D. 1867.*
1869 GRAVES, STOCKBRIDGE POTTER, M.D., Saco, Me. N. Y. Hom., 1866.
1847 GRAVES, S. W., M.D., died July 6th, 1854, æt. 35. Tr. '67, 157.
1855 GRAY, A. W., M.D. 1874.*
1844 GRAY, JOHN FRANKLIN, M.D., died June 6th, 1882, æt. 78. Tr. '82, 126.
1873 GREELEY, GEORGE H., M.D. 1873.*
1869 GREEN, BENJAMIN F., M.D. 1869.*

1881 GREEN, CHARLES LANMAN, M.D., Providence, R. I. N. Y. Univ., 1864.
1854 GREEN, GEORGE S., M.D., deceased.
1844 GREEN, JONAS, died December 25th, 1868. Tr. '70, 631.
1875 GREEN, WILLIAM BOWEN, M.D. 1875.*
1882 GREEN, WILLIAM E., M.D., Little Rock, Ark. Pulte, Cin., 1873.
1871 GREENLEAF, JOHN TALCOTT, M.D., Oswego, N. Y. N. Y. Hom., 1867.
1858 GREENLEAF, WILLIAM A., M.D. 1881.*
1884 GREGORY, EDWARD P., M.D., Waterbury, Ct. Hahn., Phil, 1873.
1855 GREGG, ROLLIN R., M.D., died August 4th, 1886, æt. 58. Tr. '87, 202.
1846 GREGG, SAMUEL, M.D., died October 25th, 1872, æt. 73. Tr. '73, 504.
1876 GRIFFIN, JOHN F., M D., Plainfield, N. J. N. Y. Hom., 1873.
1869 GRIFFITH, JETHRO J., M.D., resigned 1884.
1881 GRIFFITH, ANNA E., M.D., Camden, N. J. N. Y. Hom., 1874.
1883 GRISWOLD, CHARLES, M.D., St. Paul, Minn. Bennett Med., Chic., 1880.
1887 GRIVEAUD, GEORGE ALEX. FRANC. EMAN., M.D., St. Louis, Mo. St. Louis Hom., 1871.
1869 GROOT, SIMON I., M.D. 1881.*
1874 GROSVENOR, LEMUEL CONANT, M.D., Chicago, Ill., elected 1870. Clev. Hom., 1864.
1883 GROSS, JAMES ELDRIDGE, M.D., Chicago, Ill., elected 1870, 1875.* Hahn., Phil., 1850.
1872 GROSS, MARIA M., M.D. 1881.*
1884 GROVE, DAVID BRAINARD, M.D., Hanover, Pa. N. Y. Hom., 1883.
1848 GUERNSEY, EGBERT, M.D., New York. N. Y. Univ., 1846.
1846 GUERNSEY, HENRY NEWELL, M.D., died June 27th, 1885, æt. 68. Tr. '86, 115.
1875 GUERNSEY, JOSEPH COLBURN, M.D., Philadelphia, Pa. Hahn., Phil., 1872.
1852 GUERNSEY, WILLIAM F., M D., died Feb. 16th, 1877, æt. 63. Tr. '77, 984.
1876 GUERNSEY, WILLIAM JEFFERSON, M D., resigned 1886.
1874 GUERNSEY, WILLIAM N., M.D., New York. N. Y. Univ., 1870.
1857 GUILBERT, EDWARD AUGUSTUS, M.D. 1874.*
1869 GUILD, PHINEAS K., M.D. 1877.*
1867 GUMPERT, BENJAMIN BARTON, M.D., Philadelphia, Pa. Hahn., Phil., 1853.
1868 GUNDERLACK, CHARLES H., M.D. 1869.*
1865 GUNKLE, HENRY, M.D. 1876.*
1869 GUNTER, GEORGE WHITFIELD, M.D., died February 28th, 1886.
1847 GUY, SAMUEL SMITH, M.D., Brooklyn, N. Y. Albany Med., 1846.
1870 GWYNNE, WILLIAM M., M.D. 1881.*
1871 HACKETT, GEORGE H., M.D. 1872.*
1885 HADLEY, CHARLES HARVEY, M.D., Block Island, R. I. Boston Univ., 1881.
1869 HAESLER, CHARLES H., M.D. 1876.*
1872 HAINES, JAMES W., M.D. 1881.*
1887 HALBERT, HOMER V., M.D., Chicago, Ill. Hahn., Chic., 1887.
1844 HALE, EBEN, M.D., Boston, Mass., died August 2d, 1847, æt. 38. Tr. '67, 157.
1865 HALE, EDWIN MOSES, M.D., Chicago, Ill. Clev. Hom., 1858.
1867 HALE, WILLIAM, M.D. 1872.*
1849 HALL, E. BENTLY, M.D., 1850.*
1873 HALL, E. M., M.D., Fredericktown, O. Clev. Hom., 1871.

1859 HALL, GEORGE ALEXANDER, M.D., CHICAGO, Ill. Hahn., Phil., 1856.
1869 HALL, JOHN, M.D., resigned 1887.
1873 HALL, JOHN B., M.D. 1881.*
1874 HALL, ROBERT, M.D., Providence, R. I. N. Y. Phys. and Surg., 1856.
1881 HALL, STANTON L, M.D. 1886.*
1885 HALL, WILLIAM G., M.D., St. Joseph, Mo. Clev. Hom., 1858.
1846 HALLOCK, LEWIS, M.D., New York. N. Y. Phys. and Surg., 1826.
1886 HALSEY, FREDERICK WADSWORTH, M.D., Boston, Mass. Med. Coll., Wash., 1871.
1869 HAMILTON, CLARK T., M.D. 1874.*
1860 HAMILTON, J. R., M.D. 1868.*
1865 HAMILTON, O. D., M.D. 1871.*
1874 HAMISFAR, CHARLES W., M.D. 1881.*
1871 HAMMOND, ALBERT, M.D., deceased.
1852 HAMMOND, MILTON, M.D., Baltimore, Md. Md. Univ., 1850.
1848 HANFORD, S. CULLEN, M.D. 1867.*
1853 HANFORD, WILLIAM H., M.D. 1868.*
1887 HANSON, WILLIAM GREENE, M.D., Everett, Mass. Bost. Univ., 1878.
1860 HARBISON, WILLIAM C., M.D. 1868.*
1867 HARDING, EVAN B., M.D., died April 12, 1887.
1859 HARDING, W. F., M.D. 1874.*
1871 HARDY, JAMES E., M.D, removed to Scotland.
1849 HARK, JOSEPH, M.D. 1850.*
1876 HARPEL, EDWARD N., M D. 1882.*
1865 HARPELL, J., M.D. 1873.*
1857 HARRIS, CHARLES TAYLOR, M.D. 1832.*
1847 HARRIS, CHARLES W., M.D. 1868.*
1859 HARRIS, JOHN T., M.D. 1874.*
1882 HARRIS, WILLIAM JOHN, M.D., St. Louis, Mo. Hom., Mo., 1875.
1846 HARRIS, ZINA H., M.D., died April 30, 1859, æt. 69. Tr. '67, 157; '70, 647.
1885 HARRISON, WM. HENRY, M.D, Baton Rouge, La. Bellevue, N. Y., 1864.
1875 HART, CLEMENT L., M.D. 1881.*
1888 HART, FRANK O, M.D., West Unity, Ohio. Mich. Univ., 1884.
1866 HARTMAN, JOHN, M.D. 1874.*
1879 HARTSHORN, DANA WARREN, M.D., Cincinnati, Ohio, elected 1865, 1875.* Harvard Univ., 1854.
1887 HARVEY, AUSTIN IRVING, M.D., Newport, Me. Hahn., Phil., 1878.
1865 HARVEY, J. R., M.D., died July 7, 1866, æt. 34. Tr. '67, 157.
1875 HASBROUCK, EVERETT, M.D., Brooklyn, N. Y. N. Y. Hom., 1865.
1887 HASBROUCK, SAYER, M.D., Providence, R. I. Hahn., Phil., 1878; Boston Univ., 1882.
1858 HASBROUCK, STEPHEN, M.D. 1876.*
1881 HASSLER, WILLIAM A., M.D., Allentown, Pa. Jefferson, Phil., 1866.
1878 HASTINGS, CAROLINE E., M.D., Boston, Mass. N. E. Fem. Med., 1866.
1857 HATCH, PHILO LEWIS, M.D., Minneapolis, Minn. Clev. Hom., 1867.
1871 HATHAWAY, WILLIAM F., M D. 1872.*
1876 HAUPT, W. ALBERT, M.D., Chemnitz, Saxony. Corresponding.
1846 HAVENS, SIMEON F., M.D., withdrew 1857.

1867 HAWKS, JOHN, M.D., deceased.
1879 HAWKES, WILLIAM J., M.D., elected 1870; 1875.* Hahn., Phil., 1867.
1853 HAWLEY, LIVERUS B., M.D. Hahn., Phil., 1853.
1869 HAWLEY, WILLIAM A., M.D. 1881.*
1844 HAYNEL, A. F., M.D., deceased.
1865 HAYNES, JOHN RUSS, M.D., Indianapolis, Ind. Eclect., Cin, 1860.
1874 HAYWARD, ABNER, M.D. 1881.*
1876 HAYWARD, JOHN W., M.D., Liverpool, Eng. Corresponding.
1869 HAYWARD, JOSEPH WARREN, M.D., Taunton, Mass. Bowdoin, 1864.
1873 HAYWARD, MILTON P., M.D. 1879.*
1884 HAZARD, THEODORE LINCOLN, M.D.. Anamosa, Iowa. Mich. Univ., 1883.
1880 HEATH, JAMES DEWITT, M.D., Merrill, Wis. Hahn., Chicago, 1879.
1870 HEATON, JAMES GUTHRIE, M.D., died June 27, 1876, æt. 38. Tr. '77, 994.
1888 HEBERTON, WILLIAM W., M.D., South Orange, N. J. N. Y. Hom., 1885.
1867 HEDENBERG, JAMES, M.D., resigned 1874.
1860 HEDGES, SAMUEL PARKER, M.D., Chicago, Ill. Hahn., Chicago, 1867.
1857 HEDGES, W. LUTHER, M.D. 1881.*
1887 HEILNER, HERBERT FRANKLIN, M.D., Macon, Ga. Hahn., Phil., 1887.
1846 HELMUTH, WILLIAM SCHAEFF, M.D., died April 9, 1880, æt. 79. Tr. '80, 147.
1853 HELMUTH, WILLIAM TOD, M.D., New York. Hom., Penn., 1853.
1887 HELMUTH, WILLIAM TOD, Jr, M.D., New York. N. Y. Hom., 1887.
1867 HEMENWAY, HORACE PIERCE, M.D., Somerville, Mass. Harvard, 1862.
1844 HEMPEL, CHARLES JULIUS, M.D., died Sept. 24, 1879, æt. 68. Tr. '80, 150.
1868 HEMPSTEAD, W. C. F., M.D. 1873.*
1881 HENDERSON, LEVI, M.D. 1881.*
1879 HENDERSON, SARAH A., M.D., Sandusky, Ohio. Clev., Hom., 1875.
1867 HENRY, H. B., M.D. 1867.*
1853 HENRY, JOHN H., M.D. 1867.*
1844 HERING, CONSTANTINE, M.D., died July 23, 1880, æt. 80. Tr. '81, 45.
1847 HERRICK, ISRAEL, M.D., died February 18, 1868, æt. 71. Tr. '67, 157.
1874 HERRON, CHARLES D., M.D., Pittsburgh, Pa. Hahn., Phil., 1872.
1856 HERRON, JAMES A., M.D., died November 15, 1868.
1887 HERSHBERGER, JOSEPH P., M.D., Lancaster, Ohio. Hahn., Phil., 1881.
1865 HEWITT, THOMAS, M.D., stricken out. Tr. '71, 64.
1859 HERWITZ, STANISLAS, M.D. 1866.*
1867 HEURTLEY, R. WALTER, M.D. 1881.*
1885 HICKS, SUSAN M., M.D., Atlanta, Ga. Mich. Univ., 1883.
1871 HIGBEE, ALBERT E., M.D. 1881.*
1871 HIGBEE, CHESTER G., M.D., St. Paul, Minn. Chicago, Hahn., 1870.
1852 HILL, B. L, M.D. 1867.*
1859 HILL, CHARLES JUDSON, M.D. 1867.*
1867 HILL, ROBERT L., M.D., Oakland, Cal. Rush Med., Chicago, 1864.
1869 HILLER, FRED., M.D. 1881.*
1873 HILLER, F., Jr., M.D. 1881.*
1870 HILLS, ALFRED K., M.D. 1883.*
1875 HILLS, ARTHUR T., M.D. 1881.*
1876 HINDMAN, DAVID R., M.D., Marion, Iowa. Hom., Penn., 1857.
1867 HINDS, WILLIAM H. W., M.D., Milford, N. H. Harvard, 1861.

1869 HINKLEY, ALONZO S., M.D. 1875.*
1867 HINKS, E. FRANKLIN, M.D., died February 12, 1886, æt. 45. Tr. '86, 142.
1888 HINMAN, SPENCER D., M.D., Sparta, Mich. N. Y. Hom., 1877.
1873 HITCHCOCK, DEXTER, M.D., Norwalk, Conn. N. Y. Hom., 1873.
1867 HITCHCOCK, HENRY M., M.D. 1875.*
1879 HOAG, CLITUS S., M.D., Bridgeport, Conn. Hahn., Phil., 1877.
1876 HOAG, SANFORD, M.D. 1881.*
1876 HOBART, HENRY M., M.D., Chicago, Ill. Hahn., Chicago, 1876.
1887 HOBART, WILLIAM F., M.D., Chicago, Ill. Chicago, Hom., 1886.
1859 HOBSON, JOSEPH VIRGINIUS, M.D., Richmond, Va. Penn. Univ., 1832.
1867 HOCKING, WILLIAM F., M.D. 1881.*
1888 HODGE, JOHN W., M.D., Niagara Falls, N. Y. N. Y. Hom., 1881.
1869 HOFFENDAHL, HERMANN LOUIS HENRY, M.D., died 1881, æt. 51. Tr. '81, 125.
1880 HOFMANN, CHARLES H., M.D., Pittsburgh, Pa. Pulte, Cin., 1878.
1858 HOFMANN, ERNST F., M.D. 1874.*
1854 HOFFMAN, HERMAN H., M.D., Pittsburgh, Pa. Leipsic Univ., 1848.
1886 HOFFMAN, JACOB OLIVER, M.D., Dillsburg, Pa. Mich. Univ., 1883.
1884 HOFFMAN, JOSEPH REED, M.D., Morristown, N. J. N. Y. Hom., 1883.
1870 HOLBROOKE, LEVERETT H., M.D. 1875.*
1888 HOLCOMBE, J. RANDOLPH, M.D., Philadelphia, Pa. Penn. Univ., 1871.
1867 HOLCOMBE, N. WEBSTER, M.D. 1874.*
1860 HOLCOMBE, WILLIAM HENRY, M.D., New Orleans, La. Penn. Univ., 1847.
1879 HOLDEN, AUSTIN WILLS, M.D., Glens Falls, N. Y. Albany Col., 1848; elected in 1877.
1865 HOLLAND, HORATIO N., M.D. 1874.*
1874 HOLLETT, ARTHUR P., M.D., died September 29, 1887, æt. 40. Tr. '88, 227.
1869 HOLMES, E. B., M.D. 1875.*
1887 HOLMES, HENRY P., M.D., Lansingburgh, N. Y. N. Y. Hom, 1877.
1886 HOLMES, HORACE P., M.D., Sycamore, Ill. Hahn., Chicago, 1881.
1857 HOLT, AARON P., M.D., died March 6, 1876, æt. 68. Tr. '77, 996.
1846 HOLT, DANIEL, M.D., died April 11, 1883, æt. 73. Tr. '83, 150.
1869 HOLT, EDWARD BROWN, M.D., Lowell, Mass. Harvard, 1868.
1870 HOLT, L. E. B., M.D. 1878.*
1867 HOLTBY, JABEZ BUNTING, M.D., died February 7, 1869, æt. 31. Tr. '70, 647.
1866 HOMER, HORACE, M.D. 1876.*
1885 HOOKER, EDWARD BEECHER, M.D., Hartford, Conn. Boston Univ., 1877.
1887 HOPKINS, STEPHEN WORCESTER, M.D., Lynn, Mass. Boston Univ., 1880.
1869 HOPPIN, COURTLAND, M D., died October 19, 1876, æt. 42. Tr. '77, 985.
1850 HOPPIN, WASHINGTON, M.D., died April 1, 1867, æt. 40. Tr. '67, 157.
1876 HOPPINS, HENRY T., M.D., Geneseo, Ill. Hom., Mo., 1873.
1867 HORNBY, JOHN, M D. 1881.*
1883 HORNER, JAMES RICHEY, M.D., Allegheny, Pa. Clev. Hom., 1883.
1888 HORNING, DAVID W., M.D., Lake City, Minn. Chic. Hom., 1882.
1869 HORTON, ALONZO EDWD., M.D. 1869.*
1856 HORTON, FREEMAN, M.D., died March 3, 1861, æt. 45. Tr. '67, 157.
1866 HORWITZ, WILLIAM, M.D., deceased.
1858 HOTCHKISS, JESSE TEMPLE, M.D., deceased.

1884 HOTCHKISS, ISABELLA SCOTT, M.D., Riverside, Ill. Chic. Hom., 1880.
1854 HOUARD, JOHN G., M.D., died April 24th, 1878.
1888 HOUGH, WALTER D., M.D., Niagara Falls, N. Y. N. Y. Hom., 1881.
1859 HOUGHTON, HENRY A., M.D., Boston, Mass. Hahn., Phil., 1852.
1867 HOUGHTON, HENRY CLARK, M.D., New York. N. Y. Univ., 1867.
1859 HOUGHTON, MILO G., M.D., died May 22d, 1885, æt. 54.
1888 HOUGHTON, NEIDHARD H., M.D., Boston, Mass. N. Y. Hom., 1887.
1875 HOUSE, ROBERT B., M.D., Springfield, O. Clev. Hom., 1869.
1883 HOWARD, ERVING MELVILLE, M.D., Camden, N. J. Hahn., Phil., 1877.
1881 HOWARD, REUBEN L., M.D., died August 9th, 1884, æt. 46.
1881 HOWE, J. MORGAN, M.D, New York. N. Y. Hom., 1879.
1888 HOWELL, CONRADE A., M.D., Westerville, O. Clev. Hom., 1888.
1870 HOXIE, AUGUSTUS CHAPMAN, M.D., died May 17th, 1885, æt. 46. Tr. '85, 114.
1867 HOYNE, TEMPLE STOUGHTON, M.D., 1879.*
1883 HOYT, CHARLES, M.D., Chillicothe, O. Pulte, Cin., 1879.
1846 HOYT, D. O., M.D, 1852 *
1870 HOYT, PETER B., M D., 1871.*
1869 HOYT, WILLIAM HENRY, M.D., deceased.
1869 HUEBENER, O. T., M.D., 1881.*
1870 HUEBINGER, JOHN A., M.D., resigned 1879.
1877 HUGHES, RICHARD, M.D., Brighton, Eng. Honorary.
1846 HULL, AARON COOKE, M.D., died July 3d, 1868, æt. 50. Tr. '70, 648.
1844 HULL, AMOS GERALD, M.D., died April 25th, 1859, æt. 49. Tr. '59, 163; '67, 157; '70, 649.
1870 HULL, A. H., M.D., 1871.*
1888 HUMPHREY, FRANK M., M.D., Danielsonville, Conn. Boston Univ., 1885.
1869 HUMPHREY, OTIS MILTON, M.D, Minneapolis, Minn. L. I. Col. Hosp., N. Y., 1862.
1844 HUMPHREYS, E., M.D., died March 14th, 1848, æt. 63. Tr. '67, 157; '68, 285.
1850 HUMPHREYS, FREDERICK, M.D., expelled, '55, 12.
1867 HUND, H. B., M.D., deceased.
1868 HUNT, DAVID, JR., M.D., 1875.*
1874 HUNT, DWIGHT B., M.D., New York. N. Y. Hom., 1873.
1867 HUNT, FRANKLIN WHITEHEAD, M.D., died October 20th, 1878, æt. 68. Tr. '79, 1249.
1867 HUNT, HENRY F., M.D., Camden, N. J. Hahn., Phil., 1864.
1873 HUNT, JOHN B., M.D., 1881.*
1865 HUNT, JAMES G., M.D., 1878.*
1873 HUNT, LEMUEL J., M.D., 1873.*
1886 HUNT, MAURICE P., M.D., Delaware, O. Clev. Hom., 1879.
1868 HUNT, SAMUEL PIERRE, M.D., 1869.*
1865 HUNT, WILLIAM H., M.D., 1877.*
1868 HUNTER, A. O., M.D., 1873.*
1884 HUNTER, HORATIO MILTON, M.D., Lowell, Mass. Hom. Penn, 1857.
1867 HUNTING, JOHN P., M.D., 1867.*
1871 HUNTING, NELSON, M.D., 1881.*
1873 HURD, EDWIN HENRY, M.D., Rochester, N. Y. Genev. Med., 1847.

1888 HURD, S. WRIGHT, M.D., Lockport, N. Y. Hahn., Phil., 1880.
1869 HUSON, SAMUEL K., M.D., 1887.*
1871 HUTCHINS, HARVEY, M.D., 1872.*
1872 HUTCHINS, HORACE S., M.D., Batavia, N. Y. N. Y. Hom., 1861.
1860 HUTCHISON, ADELE STUART, M.D., 1880.*
1881 HUTCHINSON, HENRY, M.D., 1881.*
1853 HUTCHINSON, JAMES B., M.D., 1875.*
1867 INGALLS, FREDERICK W., M.D., died Feb. 15th, 1885, æt. 45. Tr. '85, 106.
1846 INGALLS, WILLIAM, M.D., died September 8th, 1851, æt. 82. Tr. '52, 44.
1881 IRWIN, HARLAN MILLER, M.D., 1886.*
1871 ISZARD, JACOB, M.D., 1878.*
1887 IVINS, HORACE F., M.D., Philadelphia, Pa. Hahn., Phil., 1879.
1876 JACKSON, EDWARD R., M.D., Dubuque, Iowa. Cin. Col., 1874.
1871 JACKSON, MERCY B., M.D., died Dec. 13th, 1877, æt. 75. Tr. '78, 1117.
1883 JACKSON, SEYMOUR A., M.D., 1883.*
1868 JACKSON, WALTER M., M.D, 1874.*
1867 JACKSON, WILLIAM F, M.D, died April 3, 1879, æt. 54.
1878 JACKSON, WILLIAM H. H., M.D., elected 1874. West Res. Clev., 1868.
1878 JACKSON, WILLIAM LEAVITT, M.D., Boston, Mass. Harvard, 1876.
1869 JACOBSON, EDWARD H., M.D., 1877.*
1857 JAEGER, CHRISTOPHER A., M.D., 1868.*
1859 JAMES, BUSHROD W., M.D., Philadelphia, Pa. Hahn., Phil., 1857.
1846 JAMES, DAVID, M.D., died June 6th, 1873, æt. 68. Tr. '74, 643.
1846 JAMES, ISAAC, M.D, died January 22d, 1874, æt. 97. Tr. '74, 645.
1866 JAMES, JOHN E., M.D., Philadelphia, Pa. Penn. Univ., 1866.
1869 JAMES, WALTER M., M.D, 1875.*
1846 JANNEY, DANIEL, M.D., died Oct. 13th, 1859, æt. 67. Tr. '67, 157; '68, 285.
1867 JAYNE, DEWITT CLINTON, M.D., Florida, N. Y. Yale, 1839.
1874 JAYNES, A. W., M.D., 1879.*
1844 JEANES, JACOB, M.D., died December 18, 1877, æt. 77. Tr. '78, 1123.
1859 JEFFERDS, GEORGE PAYSON, M.D., Bangor, Me. Bowdoin, 1844.
1886 JEFFERDS, HENRY CLARKE, M.D., Bangor, Me. Hahn., Phil., 1885.
1875 JENKS, GEORGE HENRY, M.D., 1881.*
1873 JENNEY, WILLIAM H., M.D., Norwalk, O. Clev. Hom., 1861.
1869 JERNEGAN, HOLMES MAYHEW, M.D., Boston, Mass. N. Y. Hom., 67.
1887 JEWELL, HENRY E., M.D., Nevada, Mo. Hahn., Phil., 1884.
1887 JEWETT, JOSEPH WALDO, M.D., New Haven, Conn. N. Y. Univ., 1881.
1887 JEWETT, EDWARD H., M.D., Cleveland, O. Clev. Hom., 1878.
1859 JOHNSON, DANIEL A., M.D., 1876.*
1876 JOHNSON, GEORGE H. T., M.D., Atchison, Kan. Hom. Mo., 1869.
1860 JOHNSON, ISAAC D., M.D., Kennett Square, Pa. Hom. Phil., 1852.
1869 JOHNSON, IRVING W., M.D., 1876.*
1853 JOHNSON, J. M., M.D., 1872.*
1874 JOHNSON, JAMES D., M.D., 1879.*
1876 JOHNSON, MARIA N., M.D., Philadelphia, Pa. Hahn., Chic., 1872.
1868 JOHNSON, P. E., M.D., 1873.*
1870 JOHNSON, ROBERT B., M.D., Ravenna, O. Clev. Hom., 1869.
1883 JOHNSON, SEYMOUR A., M.D., Kalkaskia, Mich. Hahn., Chic., 1873.

1886 JOHNSON, THEODORE M., M.D., West Pittston, Pa. Hahn., Phil., 1878.
1874 JONES, CHARLES E., M.D, Albany, N. Y. N. Y. Hom., 1873; Albany Med., 1873.
1869 JONES, DANIEL LEE, M.D., 1869.*
1846 JONES, E. DARWIN, M.D., Albany, N. Y. Albany Med., 1841.
1854 JONES, ELIJAH UTLEY, M.D, Taunton, Mass. Hahn., Phil., 1854.
1873 JONES, GAIUS J., M.D., Cleveland, O. Clev. Hom, 1872.
1867 JONES, HENRY C., M.D., Mount Vernon, N. Y.
1886 JONES, JOSEPH, M.D., San Antonio, Texas. Bellevue, N. Y., 1866.
1858 JONES, JOSEPH E., M.D., West Chester, Pa. Univ., Penn., 1856.
1871 JONES, JULIAN HENRY, M.D., elected 1869.*
1875 JONES, LEONIDAS M., M.D., Brooklyn, Mich. Clev. Hom, 1858.
1868 JONES, SAMUEL A., M D. 1883.*
1870 JONES, STEPHEN D., M.D. 1875.*
1867 JONES, WILLIAM AUGUSTUS, M.D. 1881.*
1844 JOSLIN, BENJAMIN FRANKLIN, M.D., died Dec. 31st, 1861, æt. 65. Tr. '67, 157.
1853 JOSLIN, BENJAMIN FRANKLIN, JR., M.D., died April 18th, 1885, æt. 55. Tr. '85, 92.
1876 JOUSSET, P., M.D., Paris, France. Honorary.
1876 KANOUSE, ABIJAH W., M.D., Appleton, Wis. Hahn., Chic., 1873.
1871 KARSNER, CHARLES, M.D. 1880.*
1884 KARSNER, DANIEL, M.D., Philadelphia, Pa. Jeff., Phil., 1865.
1883 KEATOR, BRUCE SMITH, M.D., Asbury Park, N. J. N. Y. Hom., 1881.
1888 KEEGAN, W. A., M.D., Rochester, N. Y. Chic. Hom., 1888.
1888 KEENEY, J. HARVEY, M.D., Oswego, N. Y. N. Y. Hom., 1883.
1874 KEEP, CAROLINE J., M.D., Yeomans, N. Y. N. Y. Hom., 1867.
1867 KEEP, JOHN LESTER, M.D., Brooklyn, N. Y. Hahn., Phil., 1860.
1848 KEEP, LESTER, M.D., died Aug. 20th, 1882, æt. 85. Tr. 83, 142.
1881 KEEP, S., HOPKINS, M.D., died 1887, æt. 41. Tr. '88, 229.
1869 KEITH, THEO. S., M.D., Newton, Mass. Harvard, 1868.
1881 KEIM, WILLIAM HENRY, M.D., Philadelphia, Pa. Hahn., Phil., 1871.
1884 KELLER, FRANCIS, M.D., Dallas, Tex. Iowa Univ., 1884.
1858 KELLOGG, EDWIN MERRITT, M.D., New York. M. Y. Med., 1852.
1874 KELLOGG, EDWARD W., M.D., resigned 1876.
1857 KELLOGG, JOHN L., M.D. 1872.*
1881 KENNEDY, ALONZO LEWIS, M.D., Boston, Mass. Bost. Univ., 1875.
1869 KENNEDY, ELI H., M.D. 1876.*
1872 KENNEDY, J. C., M D. 1877.*
1869 KENT, J. EMERSON, M.D. 1869.*
1886 KENT, MAUDE, M.D., Walpole, Mass. Bost. Univ., 1886.
1855 KENYON, LORENZO M., M.D., died Nov. 25th, 1887, æt. 66. Tr. '88, 216.
1874 KENYON, WILLIAM B., M.D. 1886.*
1870 KERGAN, JOHN DEPEW, M.D. 1875.*
1846 KERN, B. F., M.D., deceased. Tr. '67, 157.
1881 KERN, ELMER G., M.D. 1886.*
1879 KERN, GEORGE W., M.D. 1887.*
1874 KERN, WILLIAM H. C., M.D. 1886.*

1878 KERSHAW, J. MARTINE, M.D., St. Louis, Mo. 1878.*
1866 KEYES, ALVAH E., M.D. 1871.*
1844 KIMBALL, DANIEL STARKWEATHER, M.D., died Dec. 12th, 1882, æt. 76. Tr. '84, 648.
1881 KIMBALL, HANNAH A., M.D., resigned 1884.
1870 KING, EDWARD H., M.D., Clinton, Iowa. Hahn., Chic., 1868.
1884 KING, WILLIAM D., M.D. 1888.*
1888 KING, WILLIAM R., M.D., Washington, D. C. Hahn., Phil., 1881.
1883 KINGSLEY, MARCUS, M.D. 1887.*
1887 KINNE, ARTHUR B, M.D., Syracuse, N. Y. N. Y. Hom., 1877.
1887 KINNE, E. OLIN, M.D., Syracuse, N. Y. Mich. Univ., 1878.
1876 KINNE, PORTER S., M.D. 1881.*
1869 KINNE, THEO. Y., M.D., Paterson, N. J. Albany Med. Coll., 1862.
1848 KINSLEY, HUDSON, M.D., died March 28th, 1868, æt. 71.
1880 KINYON, CLAUDIUS B., M.D., Rock Island, Ill. Chic. Hom., 1878.
1870 KIPPAX, JOHN R., M D, Chicago, Ill. Hahn., Chic., 1869.
1844 KIRBY, STEPHEN R., M.D., deceased
1858 KIRK, ISAAC E., M.D., died August 17th, 1859, æt. 27. Tr. '67, 157.
1869 KIRK, WILLIAM V., M.D., died April 15th, 1870.
1879 KIRKLAND, WILLIAM H., M.D., Massillon, O. Clev. Hom., 1878.
1867 KIRKPATRICK, ALEXANDER, M.D. 1873.*
1844 KITCHEN, JAMES, M.D. 1867.*
1869 KITTINGER, LEONARD, M.D., Wilmington, Del. Hahn., Phila., 1863.
1886 KITTINGER, LEONARD A., M.D., Wilmington, Del. Hahn., Phila., 1881.
1875 KLINE, JOHN WESLEY, M.D. 1881.*
1874 KNAPP, THEO. P., M.D. 1881.*
1871 KNEASS, NICHOLAS W., M.D., resigned 1886.
1865 KNEIPCKE, E., M.D. 1872.*
1871 KNERR, CALVIN B., M.D., Philadelphia, Pa. Hahn., Phila., 1869.
1875 KNICKERBOCKER, SIMEON C., M.D. 1881.*
1867 KNIGHT, ELAM CLARK, M.D., died March 21st, 1888. Tr. '88, 233.
1874 KNIGHT, EDWARD B, M.D. 1879.*
1875 KNIGHT, GEORGE B, M.D., died July 20th, 1877, æt. 29. Tr. '81, 134.
1887 KNIGHT, STEPHEN HERRICK, M.D., New York. N. Y. Hom., 1886.
1871 KNOWLES, WILLIAM K, M.D. 1876 *
1888 KNOX, JOSEPH H., M.D., Orono, Me. Hahn., Phila., 1877.
1848 KOCH, AUGUST WILHELM, M.D., died May 4th, 1886, æt. 81. Tr. '86, 120.
1869 KOCH, JOHN WM., M.D. 1865.*
1868 KOCH, RICHARD, M.D. 1873.*
1875 KORNDŒRFER, AUGUSTUS, M.D., Philadelphia, Pa. Hahn., Phil., 1868.
1886 KRAFT, FRANK, M.D., Sylvania, O. Hom., Mo., 1886.
1865 KREBS, FRANZ HUGO, M.D, Boston, Mass. Harvard, 1859.
1888 KROGSTAD, HENRY, M.D., St. Paul, Minn. Iowa Univ., 1887.
1867 KUHN, C. W., M.D., resigned 1879.
1869 KUMMEL, ERNST R., M.D. 1877.*
1887 LA DOW, JACOB C., M.D. 1887.*
1858 LAFON, THOMAS, M.D., died March 20th, 1876, æt. 74.
1887 LAIRD, FRANK FOSTER, M.D., Utica, N. Y. Hahn., Phila., 1880.

1874 LAIRD, WM. TOWNSEND, M.D., Watertown, N. Y. N. Y. Hom., 1872.
1886 LANDIS, HARRY Z., M.D. 1866.*
1881 LAWRENCE, CHARLES M., M.D. 1885.*
1885 LAWSHE, JOHN ZIMMERMAN, M D., Atlanta, Ga. N. Y. Hom., 1883.
1872 LAWTON, CHARLES H., M.D., Wilmington, Del. Hahn., Phila., 1871.
1869 LEACH, GEORGE H., M.D. 1869.*
1870 LEACH, WILLIAM CONRAD, M.D. 1871.*
1882 LEAVITT, SHELDON, M.D., Chicago, Ill. Hahn., Chicago, 1877.
1866 LEE, CHARLES H., M.D. 1872.*
1860 LEE, JOHN K., M.D., died November 10th, 1887.
1888 LEE, JOHN MALLORY, M.D., Rochester, N. Y. Mich. Univ., 1878.
1888 LEE, SARAH IDELLA, M.D., Rochester, N. Y. Mich. Univ., 1888.
1883 LEEDS, CHARLES, M.D., Chelsea, Mass. Boston, Mass., 1878.
1869 LEFEVER, ISAAC, M.D. 1869.*
1872 LEGGETT, L. L., M.D., resigned 1874.
1870 LELAND, A. G., M.D. 1877.*
1886 LENGGENHAGER, FREDERICK, M.D. 1886.*
1856 LENTZ, HENRY S, M.D. 1868.*
1846 LEON, ALEXIS, M.D., died September 2d, 1866, æt. 49. Tr. '67, 157.
1882 LEONARD, WM. EDWIN, M.D., Minneapolis, Minn. Hahn., Phila., 1879.
1873 LEONARD, WM. HUNTINGTON, M.D., Minneapolis, Minn. Yale, 1853.
1886 LE SEUR, JOHN WESLEY, M.D., Batavia, N. Y. Hahn., Phil., 1886.
1888 LESEURE, OSCAR, M.D., Detroit, Mich. Mich. Univ., 1873.
1852 LEWIS, DIOCLESIAN, M.D., expelled 1856. Tr. '56, 16.
1877 LEWIS, FRANCIS PARK, M.D , Buffalo, N. Y. Pulte, Cinn., 1876.
1855 LEWIS, GEORGE W., M.D. 1875.*
1871 LEWIS, HENRY MINTON, M.D., Brooklyn, N. Y. Hahn., Phil., 1870.
1880 LEWIS, JOSEPH, Jr., M.D., Milwaukee, Wis. Hahn., Chicago, 1875.
1875 LEWIS, JOSEPH CRESSWELL, M.D., Philadelphia, Pa. Hahn., Phil., 1875.
1871 LEWIS, RICHARD, M.D., died April, 1883.
1867 LEWIS. WILLIAM H., M.D. 1873.*
1874 LIBBY, CHARLES A., M.D. 1878.*
1867 LIEBOLD, CARL THEO., M.D., died Nov. 29, 1886, æt. 55. Tr. '87, 204.
1886 LILIENTHAL, JAS. EDWARD, M.D., San Francisco, Cal. N. Y. Hom., 1880.
1867 LILIENTHAL, SAMUEL, M.D., San Francisco, Cal. Munich Univ., 1838.
1844 LINGEN, GEORGE, M.D., died 1868, æt. 50. Tr. '70, 650.
1887 LINN, ALEXANDER M., M.D., Des Moines, Iowa. Hahn., Chicago, 1883.
1870 LINN, WILLIAM D., M.D. 1875.*
1885 LINNELL, EDWARD H., M.D , Norwich, Conn. N. Y. Hom., 1876.
1874 LINNELL, JONATHAN E., M.D., Norwich, Conn. Dartmouth, 1844.
1844 LIPPE, ADOLPHUS, M.D., died January 23, 1888, æt. 75. Tr. '88, 212.
1881 LIPPE, CONSTANTINE, M.D., died January 1, 1885, æt. 45. Tr. '85, 108.
1870 LIPPINCOTT, AQUILLA B., M.D. 1875.*
1886 LIPPINCOTT, ELDRIDGE, M.D., Memphis, Tenn. Hahn., Phil., 1873.
1873 LISCOMB, PAUL D., M.D. 1873.*
1872 LODGE, EDWIN, Jr., M D. 1879.*
1866 LODGE, EDWIN A., M.D., died January 25, 1887.
1868 LOELKES, GEORGE, M.D. 1875.*

1872 LOGEE, H. FRANK, M.D. 1872.*
1866 LOGEE, H. M., M.D. 1873.*
1846 LOOMIS, JOSEPH GRISWOLD, M.D., died October 25, 1853, æt. 42. Tr. '54, 66; '67, 157.
1882 LOPEZ, CHARLES J., M.D. 1888.*
1868 LORD, FREDERICK AUGUSTUS, M.D., died September 13, 1872.
1869 LORD, ISRAEL SHIPMAN PELTON, M.D., deceased.
1869 LORING, CHARLES PARKMAN, M.D., died Jan. 27, 1877, æt. 42. Tr. '77, 986.
1858 LOUGEE, WILLIAM HATCH, M.D., Lawrence, Mass. Hahn., Phil., 1857.
1876 LOUNSBERRY, OSMER W., M.D. 1881.*
1846 LOVEJOY, EZEKIEL, M.D., died August 15, 1872, æt. 69. Tr. '73, 514.
1881 LOWE, JOHN N., M.D., Milford, N. J. N. Y. Univ., 1862.
1869 LOWE, LOUIS GOULD, M.D. 1875.*
1885 LOWENTHAL, LOUIS, M.D., Washington Heights, Ill. Chicago, Hahn., 1879.
1875 LOWES, JOSEPH E., M.D. 1879.*
1867 LOWRY, CHARLES, M.D. 1872.*
1868 LUDLAM, EDWARD M. P., M.D. 1883.*
1857 LUDLAM, REUBEN, M.D., Chicago, Ill. Penn. Univ., 1852.
1887 LUDLAM, REUBEN, Jr., M.D., Chicago, Ill. Hahn., Chicago, 1886.
1884 LUFKIN, HARRY M., M.D. 1888.*
1875 LUKENS, BENJAMIN F., M.D. 1879.*
1872 LUKENS, ISAIAH, M.D. 1881.*
1884 LUKENS, JOSEPH PAUL, M.D., Wilmington, Del. Hahn., Phil., 1878.
1873 LUKENS, MERRIKEN B., M.D, Cleveland, Ohio. Clev. Hom., 1870.
1869 LUND, O. F, M.D. 1869.*
1870 LUNGREN, SAMUEL SMITH, M.D., Toledo, Ohio. Jefferson, Phil., 1850.
1868 LUYTIES, D. R., M.D. 1875.*
1865 LYNDE, ROBERT R., M.D. 1870.*
1877 LYON, OLIVER J., M.D. 1878.*
1868 MACFARLAN, MALCOLM, M.D., Philadelphia, Pa. Yale, 1865.
1858 MACFARLAND, LAFAYETTE, M.D., died October 30, 1887.
1867 MACOMBER, ADDISON P., M.D. 1881.*
1887 MACOMBER, H. K., M.D., Pasadena, Cal. N. Y. Univ., 1867.
1853 MACY, BENJAMIN CLASBY, M.D., died September 16, 1864, æt. 55. Tr. '65, 109; '67, 157.
1846 MAIRS, JAMES, M.D., died January 1, 1876, æt. 80. Tr. '77, 976.
1860 MALIN, JOHN, M.D., Philadelphia, Pa. Hahn., Phil., 1860.
1871 MALIN, WILLIAM H., M.D. 1876.*
1883 MANAHAN, MANNING W., M.D., Atlanta, Ga. Clev. Hom., 1882.
1846 MANCHESTER, CHARLES F., M.D., died April 5, 1878, æt. 73. Tr. '78, 1110.
1867 MANDEVILLE, FRED. B., M.D. 1881.*
1868 MANN, O. H., M.D. 1873.*
1876 MANN, THOMAS H., M.D. 1881.*
1880 MANNING, CAROLINE E., M.D. 1881.*
1877 MANSFIELD, CHARLES J., M.D. 1877.*
1871 MANSFIELD, WILLIAM Q., M.D. 1875.*
1881 MANSFIELD, JOB ROBERT, M.D., Philadelphia, Pa. Hahn., Phil., 1879.
1872 MANSON, CHARLES A., M.D. 1877.*

1848 MARCY, ERASTUS EDGERTON, M.D., New York. Jefferson, Phil., 1837.
1866 MARSDEN, JOHN HATTON, M.D, died August 27, 1883.
1869 MARSHALL, ALDER VALONA, M.D. 1874.*
1879 MARSHALL, JULIA ANN, M.D. 1879.*
1877 MARTIN, ARELLO S., M.D. 1877.*
1871 MARTIN, CONSTANTINE HERING, M.D., Allentown, Pa. Bellevue, N. Y., 1866.
1868 MARTIN, HENRY NOAH, M.D., Philadelphia, Pa. Hahn., Phil., 1865.
1886 MARTIN, JOHN S., M.D, Muncie, Ind. Clev. Hom., 1883.
1851 MARTIN, JOSEPH LLOYD, M.D., Baltimore, Md. N. Y. Univ., 1846.
1883 MARTIN, LESLIE, M.D., Baldwinsville, N. Y. Albany Med. Col., 1864.
1876 MARTIN, SAMUEL J., M.D. 1885.*
1878 MARTIN, WILLIAM J, M.D., Pittsburgh, Pa. Hahn., Phil., 1877.
1867 MASON, STEPHEN R., M.D., Duvall's Bluff, Ark. Rush Med., Chicago, 1851.
1872 MASSEY, ISAIAH B., M.D. 1879.*
1859 MATTHES, GUSTAVUS FELIX, M.D., New Bedford, Mass. Halle Univ., 1836.
1881 MATTHEWS, MARY DENISON MOSS, M.D., Providence, R.I. Bost. Univ., 1875.
1846 MATTHEWS, CALEB BENTLEY, M.D., died May 27, 1851, æt. 50. Tr. '51, 14.
1867 MATTHEWS, MOSES M., M.D., died November 23, 1867, æt. 58. Tr. '68, 286; '70, 651.
1880 MAXON, JOSEPH S., M.D., Walworth, Wis. Hahn., Chicago, 1875.
1887 MAYCOCK, BURT, J., M.D., Buffalo, N. Y. Hahn., Chicago, 1886.
1868 MAYER, MARTIN, M.D., died January 19, 1877, æt. 45. Tr. '77, 992.
1885 MCAFEE, E. M., M.D., Mt. Carroll, Ill., elected 1869. 1875.*
1869 MCAFEE, WILLIAM D., M.D. 1874.*
1856 MCALLISTER, JAMES M., M.D, deceased. Tr. '67, 158.
1855 MCCHESNEY, A. B., M.D. 1867.*
1873 MCCHESNEY, A. C., M D.
1860 MCCLATCHEY, ROBERT J., M.D., died January 15, 1883, æt. 47. Tr. '83, 154.
1881 MCCLELLAND, DAVID, M.D., West Hoboken, N. J. Hahn., Chicago, 1880.
1879 MCCLELLAND, JOHN BLACK, M.D., Pittsburgh, Pa. Hahn., Phil., 1879.
1867 MCCLELLAND, JAS. HENDERSON, M.D, Pittsburgh, Pa. Hahn., Phil., 1867.
1866 MCCLELLAND, R. C., M.D. 1867.*
1884 MCCLELLAND, ROBERT WATSON, M.D., Pittsburgh, Pa. Hahn., Phil., 1884.
1881 MCCLURE, ELIZA HENDERSON LANG, M.D., Philadelphia, Pa. Boston Univ., 1877.
1871 MCCOLLUM, MATTHEW, M.D., died January 4, 1875.
1882 MCCONNELL, ROB'T NELSON, M.D., Upper Sandusky, Ohio. Clev. Col., 1865.
1879 MCCREA, PHILIP A., M.D., Buffalo, N. Y. Univ. Buffalo, 1875.
1873 MCDERMOTT, GEORGE C., M.D., Cincinnati, O. Clev. Hom., 1870.
1874 MCDONALD, WILLIAM OGDEN, M.D., New York. N. Y. Med., 1855.
1886 MCDOWELL, CHARLES, M.D., New York. N. Y. Hom., 1878.
1871 MCGEORGE, WALLACE, M.D., Woodbury, N. J. Elected 1869. Hahn., Phil., 1868.
1883 MCGILL, W. D., M.D., Buffalo, N. Y. Clev. Hom., 1880.
1875 MCGRANAGHAN, WILLIAM H., M.D. 1879.*
1875 MCGUIRE, DAVID J., M.D, resigned 1887.
1885 MCKIBBON, ALICE B, M.D., died 1886.

1847 McKnight, Charles G., M.D. 1867.*
1886 McLachlan, Daniel A., M.D., Ann Arbor, Mich. Mich. Univ., 1879.
1874 McLaren, William B., M D., resigned 1878.
1869 McLean, John, M.D. 1873.*
1860 McLeod, George I., M.D. 1876.*
1870 McLin, George H., M.D. 1876.*
1844 McManus, Felix R., M.D., died March 3d, 1885, æt. 78. Tr. '85, 93.
1856 McManus, F. S., M.D., died November 20th, 1857, æt. 25. Tr. '67, 158.
1869 McMichael, L. D., M.D. 1874.*
1866 McMurray, Robert, M D., New York. Phys. and Surg., Fairfield, 1840.
1872 McNeil, C. Holmes, M.D., 1872.*
1867 McNeil, Daniel, M.D 1887.*
1844 McVickar, John Augustus, M.D., New York. N. Y. Phys. and Surg., 1833.
1855 Meachem, I. J., M.D. 1867.*
1885 Mellus, Edward Linden, M.D., Worcester, Mass. Jeff., Phil., 1878.
1873 Mera, Harry P., M.D. 1878.*
1871 Mercer, Robert P., M.D., Chester, Pa. Hahn., Phil., 1861.
1876 Mercer, William Mosby, M D., Galveston, Tex. Univ. La., 1859.
1880 Merrick, Myra K., M.D., Cleveland, O. Cent. Med. Col., Roch., 1852.
1844 Merrill, John, M.D., died June 7th, 1855, æt. 73. Tr. '67, 157.
1869 Merrill, John C., M.D. 1874.*
1851 Metcalf, James W., M.D., died April 14th, 1856, æt. 39. Tr. '67, 158.
1871 Middleton, Caleb S., M D., Philadelphia, Pa. Hahn., Phil., 1862.
1848 Middleton, J. D., M.D., deceased.
1869 Middleton, Melbourne F., M.D., Camden, N. J. Hahn., Phil., 1868.
1847 Middleton, R. S., M.D., deceased. Tr. '67, 158.
1886 Mifflin, Robert W., M.D. 1886.*
1887 Milbank, William E., M.D., Albany, N. Y. Albany Med., 1872.
1867 Millard, Henry B., M.D., resigned 1871.
1848 Miller, Adam, M.D. 1869.*
1854 Miller, A. C., M.D. 1867.*
1875 Miller, Christopher C., M.D., Detroit, Mich. Hom., Phil., 1868.
1852 Miller, Frederick, M D. 1867.*
1871 Miller, Harrison V., M.D., died Nov. 26th, 1879, æt. 51. Tr. '80, 152.
1884 Miller, Irving, M.D., Baltimore, Md. Univ. Md., 1877.
1883 Miller, John, M.D., Buffalo, N. Y. Hahn., Chic., 1882.
1869 Miller, John M., M.D. 1869.*
1867 Miller, Robert E., M.D. 1881.*
1852 Miller, Thomas, M.D., died November 21st, 1867, æt. 70. Tr. '68, 286.
1881 Miller, William L., M.D. 1885.*
1888 Miller, Zachary T., M.D., elected 1878, Pittsburgh, Pa. Hahn., Phil., 1877.
1879 Mills, James P., M.D., Chicago, Ill. Hahn., Phil., 1873.
1887 Millsop, Sarah J., M D., Bowling Green, Ky. Hahn., Chic., 1886.
1888 Minard, Will. Frank, M.D., Burlington, Vt. Hahn. Phil., 1887.
1869 Minor, John C., M.D., resigned 1881.
1858 Minton, Henry, M.D., Brooklyn, N. Y. Hahn., Phil., 1853.

1888 MILLER, ZACHARY T, M.D., Pittsburgh, Pa. Hahn., Phila., 1877.
1888 MINTON, HENRY BREWSTER, M.D., Brooklyn, N. Y. N. Y. Hom., 1887.
1868 MITCHELL, GEORGE B. I., M.D. 1887.*
1866 MITCHELL, JOHN JAMES, M.D., Newburgh, N. Y. N. Y. Med. Coll., 1857.
1875 MITCHELL, JOHN NICHOLAS, M.D., Philadelphia, Pa. Hahn., Phil., 1873.
1866 MITCHELL, JOSEPH SIDNEY, M.D., Chicago, Ill. Bellevue, N. Y., 1865.
1867 MITCHELL, JOHN W., M.D., died March 27th, 1887.
1881 MOFFAT, EDGAR VICTOR, M.D., New York. N. Y. Hom., 1879.
1881 MOFFAT, JOHN LITTLE, M.D., Brooklyn, N. Y. N. Y. Hom., 1877.
1867 MOFFAT, REUBEN CURTIS, M.D., Brooklyn, N. Y. N. Y. Univ., 1846.
1876 MOHR, CHARLES, M.D., Philadelphia, Pa. Hahn., Phil., 1875.
1871 MOKE, JOSEPH H., M.D. 1872.*
1876 MONMONIER, JULIUS L., M.D., Brooklyn, N. Y. N. Y. Hom., 1871.
1874 MONROE, G. T., M.D. 1879.*
1867 MONTANYE, WILLIAM D., M.D. 1878.*
1869 MOORE, DAVID F., M.D. 1873.*
1853 MOORE, FRANCIS R., M.D. 1865.*
1875 MOORE, GEORGE W., M D., Springfield, O. Clev. Hom., 1870.
1869 MOORE, J. CLIFFORD, M.D. 1873.*
1869 MOORE, J. C. W., M.D. 1869.*
1869 MOORE, JAMES OTIS, M.D., died November 16th, 1886, æt. 64.
1876 MOORE, J. MURRAY, M.D. 1881.*
1848 MOORE, JOHN D., M.D., died Sept. 20th, 1867, æt. 65. Tr. '70, 627; '70, 652.
1860 MOORE, JOSEPH, M.D., resigned 1877.
1860 MOORE, THOMAS, M.D., died March 25th, 1882, æt. 55. Tr. '82, 143.
1875 MORDON, RALPH J. P., M.D. 1875.*
1855 MORGAN, ALONZO R., M.D. 1877.*
1881 MORGAN, EDWARD JAY, JR., M.D. 1885.*
1867 MORGAN, JOHN COLEMAN, M.D., Philadelphia, Pa. Penn. Med., 1852.
1872 MORGAN, LAURA, M.D. 1875.*
1884 MORGAN, WILLIAM L., M.D., Baltimore, Md. Pulte, Cin., 1876.
1846 MORRILL, ALPHEUS, M.D., died May 9th, 1874, æt. 62. Tr. '74, 647.
1860 MORRILL, CHARLES, M.D. 1867.* Re-elected 1874.*
1878 MORRILL, EDWIN C., M.D., Norwalk, O. Clev. Hom., 1866. Elected 1873.
1886 MORRILL, EZEKIEL, M.D., Concord, N. H. Elected 1858. 1874.*
1868 MORRILL, G. D., M.D. 1873.*
1867 MORRILL, HENRY B., M.D. 1874.*
1858 MORRILL, HENRY EDWIN, M.D., died March 6th, 1874, æt. 61. Tr. '74, 656.
1866 MORRILL, SHADRACH C., M.D. 1874.*
1884 MORRIS, JOHN W., M D., Wheeling, W. Va. Pulte, Cin, 1876.
1870 MORRISON, JAMES E., M.D. 1871.*
1859 MORSE, E. E., M.D. 1867.*
1876 MORSE, GEORGE, M.D. 1881.*
1869 MORSE, MARTIN V. B., M.D., Marblehead, Mass. N. Y. Hom., 1868.
1867 MORSE, NATHAN R., M.D., Salem, Mass. Vermont Univ., 1862.
1872 MORSE, LUCIUS D., M.D., Elyria, O. Hahn., Phil., 1872.
1844 MOSE, ——, M.D. 1846.*
1879 MOSHER, CHARLES M., M.D., Easton, N. Y. Albany Med. Coll., 1856.
1869 MOSMAN, NATHAN A., M.D., New York. N. Y. Hom., 1861.

1880 Moss, Oscar Burnham, M.D., Kansas City, Mo. Clev. Hom., 1870.
1884 Muhleman, Charles L., M.D. 1885.*
1873 Mukhopadhyaya, Sumbul, M.D., Calcutta, India. Corresponding.
1869 Mull, Philip W., M.D. 1877.*
1876 Muller, Clotar, M.D., died November 10th, 1877, æt. 59. Tr. '78, 1127.
1859 Munde, Charles, M.D. 1884.*
1848 Munger, Erastus A., M D., died November 4th, 1879, æt. 66. Tr. '80, 152.
1867 Munsey, Barton, M.D., Laconia, N. H. Hahn., Phil., 1850.
1887 Munson, Mary F., M.D., Los Angeles, Cal. Hahn., San Fr., 1887.
1885 Munson, Reginald, M.D., Washington, D. C. Hahn., Chic., 1884.
1877 Murphy, Edmund Andrew, M.D., New Orleans, La. Hom., Mo., 1866.
1886 Murray, Arthur S., M.D., Fair Haven, Conn. Hahn., Phil., 1882.
1875 Murrell, William J., M.D., Mobile, Ala. N. Y. Hom., 1861.
1881 Mustis, Henry von, M.D., New York. N. Y. Hom., 1878.
1881 Nash, Eugene B., M.D., Cortland, N. Y. Clev. Hom., 1874.
1881 Needham, Hugh John, M.D. 1886.*
1867 Negendank, Augustus, M.D., Wilmington, Del. Phil. Med., 1854.
1844 Neidhard, Charles, M.D., Philadelphia, Pa. Univ. Jena, 1853.
1859 Neilson, James C., M.D., died November 14, 1874, æt. 55. Tr. '75, 803.
1875 Neville, Abbie S. J., M.D. 1875.*
1871 Neville, W. H. H., M.D. 1879.*
1858 Newcomb, George V., M.D. 1867.*
1872 Newell, William H., M.D. 1877.*
1868 Nibelung, Charles H., M.D. 1874.*
1872 Nichol, Thomas, M.D., Montreal, Canada. Hom., Phil., 1857.
1876 Nichols, Ammi Sibley, M.D., Portland, Oregon. Hahn., Phil., 1876.
1880 Nichols, Charles Lemuel, M.D., Worcester, Mass. Harvard, 1875.
1867 Nichols, Frank, M.D. 1881.*
1876 Nichols, George, M.D., Brooklyn, N. Y. Hom., Phil., 1861.
1874 Nichols, G. F., M.D. 1881.*
1859 Nichols, John S., M.D., died January 15, 1862, æt. 36. Tr. '67, 158.
1859 Nichols, Lemuel Bliss M.D., died Sept 28, 1883, æt. 67. Tr. '84, 655.
1886 Nickelson, Wm. Herbert, M.D., Adams, N. Y. Hahn., Chicago, 1881.
1887 Nordstrom, Cynthia Maria, M.D., Malden, Mass. Boston Univ., 1883.
1873 Norton, Charles A., M.D. 1879.*
1887 Norton, Claude Richard, M.D., Philadelphia, Pa N. Y. Hom., 1872.
1872 Norton, George S., M.D., New York. N. Y. Hom., 1872.
1848 Norton, Lucien Hervey, M.D., died January 2, 1884. Tr. '84, 661.
1869 Nott, Eliphalet, M.D. 1877.*
1881 Nott, Fred. Josiah, M.D., New York. N. Y. Hom , 1877.
1870 Nottingham, John, M.D. 1878.*
1888 Nottingham, John C., M.D., Bay City, Mich. Bennett Med., Chicago, 1873.
1877 Nunez, Marquis de, M.D. Tr. '80, 154.
1867 Nute, T. Riker, M.D. 1874.*
1850 Ober, Benjamin, M.D., died May 14, 1867, æt. 67. Tr. '67, 158.
1857 Ober, Levi E., M.D., died March 26, 1881, æt. 62. Tr. '81, 126.
1882 Obetz, Henry L., M.D., Ann Arbor, Mich. Clev. Hom., 1874.
1872 Ockford, George Morgan, M.D., Lexington, Ky. Clev. Hom., 1872.

1844 OKIE, ABRAHAM HOWARD, M.D., died September 21, 1882.
1877 OKIE, WILLIAM T., M.D. 1877.*
1884 OLIN, ROLLIN CHARLES W., M.D., Detroit, Mich. Mich. Univ., 1877.
1882 OLMSTEAD, CHARLES C., M.D., Milwaukee, Wis. Clev. Hom., 1860.
1886 OLMSTEAD, LOUIS JUBA, M.D., Kansas City, Mo. Clev. Hom., 1883.
1882 OLNEY, FRANK B., M.D. 1886.*
1880 ORDWAY, LEONARD S., M.D. N. Y. Hom., 1864; elected 1870. 1875.*
1859 ORME, FRANCIS HODGSON, M.D., Savannah, Ga. N. Y. Univ., 1854.
1846 ORME, JOHN, M.D.
1856 ORMES, CORNELIUS, M.D., died April 20, 1886, æt. 79. Tr. '88, 214.
1883 ORMES, FRANCIS D., M.D, Jamestown, N. Y. Clev. Hom., 1883.
1867 OSBORNE, JAMES H., M.D. 1874.*
1879 OSBORNE, NEHEMIAH, M.D. 1883.*
1847 OSGOOD, DAVID, M.D., died February 23, 1863, æt. 69. Tr. '67, 158.
1876 OSTROM, HOMER I., M.D., New York. N. Y. Hom., 1873.
1872 OWEN, IRA C, M.D. 1877.*
1872 OWENS, JAMES B., M.D. 1878.*
1865 OWENS, WILLIAM, M.D., Cincinnati, Ohio. Eclectic, Cincinnati, O., 1849.
1878 OWENS, WILLIAM, JR., Cincinnati, Ohio. Pulte, Cin., 1878.
1881 PACKARD, HORACE, M.D., Boston, Mass. Boston Univ., 1880.
1868 PACKARD, LIBERTY D., M.D., Boston, Mass. N. Y. Hom., 1862.
1869 PACKER, DAVID, M.D. 1874.*
1869 PACKER, EDMUND H., M.D. 1878.*
1886 PACKER, HENRY ERNEST, M.D., Barre, Vt. N. Y. Hom., 1881.
1869 PAGE, MOSES F., M.D., died January 20, 1881, æt. 58. Tr. '81, 132.
1844 PAINE, HENRY DELAVAN, M.D., New York. Phys. and Surg., N. Y., 1838.
1850 PAINE, HORACE MARSHFIELD, M.D., Albany, N. Y. N. Y. Univ., 1849.
1879 PAINE, NATHANIEL EMMONS, M.D., Westborough, Mass. Albany Med., 1875.
1846 PAINE, JOHN ALSOP, M.D., died June 16, 1871, æt. 76. Tr. '74, 651.
1853 PAINE, JOSEPH P., M.D., Roxbury, Mass. Hahn., Phil, 1852.
1856 PALMER, FRED. NILES, M.D.. died May 10, 1886, æt. 72. Tr. '86, 123.
1869 PALMER, GEORGE B., M.D. 1878.*
1875 PALMER, GEORGE H., M.D. 1881.*
1848 PALMER, MILES WESLEY, M.D., New York. N. Y. Univ., 1847.
1888 PALMER, LYMAN R., M.D., Minneapolis, Minn. Hahn., Chicago, 1880.
1846 PALMER, WALTER C., M.D., deceased.
1881 PARDEE, ENSIGN B., M.D., New York. N. Y. Univ., 1875.
1886 PARDEE, EMILY V.D., M.D., S. Norwalk, Conn. N.Y. Hom. Women, 1875.
1871 PARK, OLIVER G., M.D. 1871.*
1871 PARKER, GEORGE W., M.D. 1876.*
1869 PARKER, HIRAM, M.D. 1869.*
1847 PARKER, H. C, M.D., died December 8, 1861, æt. 48. Tr. '67, 158; '68, 286.
1881 PARKHURST, GABRIEL H., M.D. 1885.*
1881 PARKHURST, LUMEN BOYDEN, M.D., Northampton, Mass. Boston Univ., 1879.
1853 PARKS, JOHN M, M.D., Hamilton, Ohio. Ohio Med., 1840.
1873 PARMELEE, MYRON H., M.D., Toledo, Ohio. Hahn., Chicago, 1870.
1869 PARSELL, GEORGE H., M.D. 1875.*

1883 PARSONS, ANSON, M.D., Springboro, Pa. Univ. Md., 1865.
1888 PARSONS, EDGAR C., M.D., Meadville, Pa. Hahn., Phil., 1877.
1870 PARSONS, EPHRAIM, M.D. 1878.*
1879 PARSONS, KATHERINE, M.D., Cleveland, Ohio. Clev. Hom., 1873.
1885 PARSONS, SCOTT B., M.D., St. Louis, Mo. Hahn., Chicago, 1864, elected 1868. 1875.*
1873 PATCHEN, GEORGE HENRY, M.D., New York. N. Y. Hom., 1868.
1870 PATCHIN, T. J., M.D. 1881.*
1882 PATTON, JAMES H., M.D. 1885.*
1867 PAYNE, FRED. W., M.D., Boston, Mass. Hahn., Phil., 1868.
1879 PAYNE, GEORGE HARKNESS, M.D., Boston, Mass. Boston Univ., 1875.
1860 PAYNE, JAMES H., M.D., Boston, Mass.
1881 PAYNE, JOHN HOWARD, M.D. 1885.*
1844 PAYNE, JOHN, M.D., died October 7, 1857, æt. 56. Tr. '67, 158; '68, 286.
1847 PAYNE, LYCURGUS V., M.D., died July 8, 1853, æt. 29. Tr. '54, 72; '67, 158.
1879 PAYNE, MARY AMELIA, M.D., Boston, Mass. Boston Univ., 1877.
1846 PAYNE, WILLIAM E., M.D., died March 9, 1877, æt. 63. Tr. '77, 971.
1846 PEAK, JESSE M., M.D., deceased. Tr. '67, 158.
1875 PEARCE, ROBERT W., M.D. 1886.*
1884 PEARMAN, MAY B., M.D. Hom., Mo., 1870.
1886 PEARSALL, JOHN A., M.D., Saratoga Springs, N. Y. N. Y. Hom., 1876.
1867 PEARSALL, SAMUEL J., M.D., Saratoga Springs, N. Y. Hahn., Phil., 1858.
1887 PEARSALL, WILLIAM S., M.D., New York. N. Y. Hom., 1885.
1867 PEARSON, CLEMENT, M.D., died January 29, 1886, æt. 67. Tr. '86, 132.
1851 PEARSON, WILLIAM, M.D. 1871.*
1874 PEASE, GILES, M.D., deceased.
1868 PEASE, GILES M., M.D., San Francisco, Cal. Harvard, 1863.
1868 PECK, EDWIN H., M.D. 1884.*
1879 PECK, GEORGE BACHELOR, M.D., Providence, R. I. Yale, 1871.
1850 PECK, WILLIAM, M.D., died June 3, 1857. Tr. '67, 158.
1872 PEER, GEORGE W., M.D., died January 12th, 1883, æt. 63
1846 PEHRSON, J. G. G., M.D., died 1861.
1846 PEIRSON, F. D., M.D. 1867.*
1877 PENFIELD, SOPHIA, M.D., Danbury, Conn. N. Y. M. C. Wom., 1869.
1870 PENNOYER, NELSON A., M.D., Kenosha, Wis. Hahn., Phil., 1870.
1887 PERCY, FREDERICK BOSWORTH, M.D., Brookline, Mass. Boston Univ., 1880.
1887 PERCY, GEORGE EMORY, M.D., Salem, Mass. Boston Univ., 1879.
1884 PERKINS, CHARLES WILLIAMSON, M.D., Chester, Pa. Hahn., Phil., 1870.
1881 PERKINS, NATHANIEL ROYAL, M.D., Winchendon, Mass. Bost. Univ., 1876.
1858 PERKINS, ROGER GRISWOLD, M.D., died August 29th, 1861. Tr., '67, 158; '70, 653.
1886 PERKINS, WESLEY BENNOR, M.D., Bridgton, Me. N. Y. Hom., 1873.
1870 PERRINE, GEORGE W., M.D., died April 20th, 1872, æt. 55. Tr. '74, 650.
1858 PERRINE, WILLIAM L. R., M.D., Brooklyn, N. Y. Phys. and Surgs., N. Y., 1845.
1847 PETERSON, JAMES, M.D., died April, 1870.
1848 PETHERBRIDGE, JOSEPH B., M.D., deceased.
1872 PETTENGILL, ELIZA F., M.D., Philadelphia, Pa. Phila. Wom., 1866.

1871 PETTENGILL, SARAH B., M.D., deceased.
1873 PETTET, JONATHAN, M.D. 1885.*
1871 PFEIFFER, GEORGE S. F., M.D., resigned 1877.
1857 PFOUTS, JOHN S., M.D. 1881.*
1868 PHELAN, R. A., M.D. 1873.*
1867 PHILLIPS, ALBERT WILLIAM, M.D., Birmingham, Conn. Hahn., Chicago, 1861.
1871 PHILLIPS, EDWARD H., M.D. 1881.*
1881 PHILLIPS, LESLIE ALMON, M.D., Boston, Mass. Boston Univ., 1877.
1873 PHILLIPS, WILLIAM A., M.D., resigned 1882.
1882 PICKET, COLUMBUS M., M D., Albion, Ill. Pulte, Cin., 1881.
1859 PIERCE, LEVI, M.D. 1874.*
1852 PIERCE, T. A., M.D. 1867.*
1870 PIERSON, ALFRED MANLEY, M.D., resigned 1884.
1867 PIKE, JOSEPH G. W., M.D., deceased.
1888 PIKE, LUCY JOHNSON, M.D., Lynn, Mass. Boston Univ., 1885.
1844 PILKIN, ———, M.D. 1846.*
1844 PIPER, JOHN R, M.D. 1871.*
1880 PITCAIRN, HUGH, M.D., Harrisburg, Pa. , Hahn., Phil., 1880.
1857 PITNEY, AARON, M.D., died April 7th, 1865, æt. 72. Tr. '67, 158.
1874 PLIMPTON, CLARA C., M D., Nashville, Tenn. Wom. Col., N. Y., 1874.
1885 POMEROY, HARLAN, M.D., Cleveland, O. Clev. Hom., 1879.
1854 POMEROY, THOMAS F., M.D. Clev. Hom., 1853.
1877 POND, JOHN N., M.D. 1885.*
1847 POOL, AUGUSTUS, M.D., died August 9th, 1883, æt. 64. Tr. '84, 663.
1879 POPE, ALFRED C., M.D., Tunbridge Wells, Eng. Corresponding.
1876 POPE, GUSTAVUS W., M.D., Washington, D. C. Albany Med., 1851.
1876 POPE, WILLIS G., M.D., Keeseville, N. Y. N. Y. Hom., 1870.
1871 POPPE, OTTO B., M.D. 1876.*
1870 PORTER, EDWARD, M D., died March 1st, 1879, æt. 46. Tr. '79, 1246.
1887 PORTER, EUGENE H., M.D., NEW YORK. N. Y. Hom., 1885.
1880 PORTER, PHILIP, M.D., Detroit, Mich. L. I. Col., 1873.
1847 POTTER, E. A., M.D., died July 29th, 1867, æt. 61.
1879 POTTER, SAMUEL O. L., M.D. 1882.*
1880 POULSON, HAROLD LUDWIG, M.D. 1884.*
1867 POULSON, PETER WILLIAM, M.D., San Francisco, Cal. N. Y. Hom., 1866.
1871 POWELL, HANS, died January 22d, 1885, æt. 44. Tr. '85, 110.
1888 POWELL, WILLIAM C., M.D., Bryn Mawr, Pa. Hahn., Phila., 1879.
1874 PRATT, EDWIN HARTLEY, M.D., Chicago, Ill. Hahn., Chic., 1873.
1867 PRATT, LEONARD, M.D., Wheaton, Ill. Hahn., Phil., 1852.
1859 PRATT, LESTER M., M.D., Albany, N. Y. Hahn., Phil., 1854.
1874 PRATT, WILLIAM M., M.D., New York. N. Y. Hom., 1861.
1876 PRATT, JOHN W., M.D. 1885.*
1870 PRENTICE, NATHAN F., M.D., died April 19th, 1873, æt. 58. Tr. '75, 807.
1866 PRESTON, COATES, M.D., died August 9th, 1881, æt. 61. Tr. '82, 138.
1851 PRESTON, HENRY C., M.D. 1867.*
1871 PRESTON, HENRY G., M.D. 1876.*
1871 PRESTON, MAHLON, M.D. 1885.*

1867 PRICE, ELIAS C., M.D., Baltimore, Md. Maryland Univ., 1848.
1876 PRICE, EMMOR HUNT, M.D., Chattanooga, Tenn. Pulte, Cin., 1873.
1846 PRICE, WILLIAM, M.D. 1848.*
1873 PRINDLE, CLARENCE W., M.D. 1881.*
1886 PRINTY, JAMES ANTHONY, M.D., Chicago, Ill. Iowa Univ., 1882.
1886 PRITCHARD, W. E., M.D. 1886.*
1888 PULFORD, ALFRED, M.D., Ansonia, Conn. Clev. Hom., 1885.
1858 PULSIFER, MOSES RUSS, M.D., died January 27th, 1877, æt. 78.
1858 PULSIFER, NATHAN G. H., M.D. 1877.*
1844 PULTE, JOSEPH HIPPOLYTE, M.D., died February 24th, 1884, æt. 73. Tr. '84, 643.
1873 PURDY, W. S., M.D. 1879.*
1886 PUTNAM, THOMAS JOHN, M.D., North Adams, Mass. Clev. Hom., 1877.
1887 PUTNAM, WILLIAM B., M.D. 1877.*
1886 PUTNAM, WARREN E., M.D., Hoosac, N. Y. Clev. Hom., 1881.
1872 QUICK, THEODORE, M.D., died April 4th, 1877, æt. 51. Tr. '77, 989.
1844 QUIN, James M., M.D., died March 27th, 1868, æt. 62. Tr. '68, 286; '70, 654.
1883 QUINBY, EDGAR C., M.D., Titusville, Pa. Clev. Hom., 1881.
1876 QUINT, SILAS H., M.D. 1884.*
1877 QUIRELL, CLAUDIUS A., M.D. 1883.*
1874 RAMAGE, R. H. Y., M.D. 1874.*
1885 RAND, JOHN PRENTICE, M.D., Monson, Mass. N. Y. Hom., 1883.
1881 RAND, NEHEMIAH WHEELER, M.D., Monson, Mass. N. Y. Hom., 1878.
1852 RANDEL, JOHN MASSEY, M.D., died July 13th, 1858, æt. 27. Tr. '59, 166.
1854 RANDEL, WM. HENRY, M.D, died December 14th, 1887, æt. 55. Tr. '88, 222.
1881 RANKIN, EGBERT GUERNSEY, M.D., New York. N. Y. Univ., 1878.
1865 RANKIN, JOHN S., M.D., Pittsburgh, Pa. Hahn., Phila., 1858.
1869 RAUE, CHARLES G., M.D., Philadelphia, Pa. Phila. Med., 1850.
1882 RAY, WILLIAM ROBERT, M.D., Melbourne, Victoria, Australia. Boston Univ., 1882.
1851 RAYBORG, CHRISTOPHER H., M.D. 1867.*
1848 RAYMOND, JONAS C., M.D., Oakland, Cal. Hahn., Phila., 1857.
1844 REA, ALBUS, M.D., died October 14th, 1848, æt. 50. Tr. '50, 30.
1883 READ, HERBERT H., M.D., Halifax. R. Col. S., Edin., 1861. Elected 1869. 1875.*
1870 READ, JAMES S., M.D. 1875.*
1860 READING, EDWARD, M.D., Hatborough, Pa. Hahn., Phila., 1853.
1881 READING, J. HERBERT, M.D., Philadelphia, Pa. Hahn., Phila., 1878.
1848 READING, JOHN R., M.D., died February 14th, 1886, æt. 60. Tr. '86, 126.
1887 READING, L. WILLARD, M.D., Philadelphia, Pa. Hahn., Phila., 1880.
1888 READING, THOMAS, M.D., Pittsburgh, Pa. Hahn., Phila., 1888.
1860 RECORD, EDWARD J., M.D. 1868.*
1883 REDDISH, ALBERT W., M.D., Sidney, O. Clev. Hom., 1883.
1860 REED, JACOB, JR., M.D. 1876.*
1887 REED, JOSEPH O., M.D., Middletown, N. Y. N. Y. Hom., 1887.
1874 REED, MARO MCLEAN, M.D., died June 28th, 1887, æt. 86. Tr. '78, 1115.
1885 REED, ROBERT GATES, M.D., Woonsocket, R. I. Boston Univ., 1877.

1885 REED, THOMAS E., M.D., Middletown, O. Hahn., Phila., 1872.
1857 REED, WILLIAM A., M.D. 1881.*
1888 REEVES, JOSEPH M., M.D., Philadelphia, Pa. Hahn., Phila., 1877.
1848 REICHELM, GUSTAVUS, M.D., died November 22d, 1861, æt. 60. Tr. '65, 109.
1846 REILAY, J. P., M.D. 1848.*
1870 REINHOLD, HAHNEMANN E., M.D., died March 6th, 1879, æt. 35. Tr. '79, 1245.
1874 REMBAUGH, ALONZO C., M.D. 1879.*
1874 REN-DELL, ADDIE L, M.D. 1874.*
1883 RENNINGER, JOHN STEPHEN, M.D, Marshall, Minn. Hahn., Chicago, 1881.
1869 REUD, WILLIAM R, M.D., resigned 1880.
1883 REYNOLDS, BELLE S., M.D., Chicago, Ill. Hahn., Chicago, 1880.
1869 REYNOLDS, HERBERT, M.D. 1877.*
1869 REYNOLDS, PORTER L. F, M.D. 1874.*
1870 REYNOLDS, WILLIAM B., M.D. 1881.*
1846 RHEES, MORGAN JOHN, M.D., Wheeling, W. Va. Jeff., Phil., 1846.
1871 RICARDO, NORTON C., M.D., resigned 1875.
1867 RICE, NATHANIEL B., M.D. 1873.*
1874 RICE, WILLIAM B, M.D. 1879.*
1877 RICH, ALVIN B., M.D. 1887.*
1859 RICHARDS, DAVID STIMSON, M.D. 1868.*
1886 RICHARDS, GEORGE E., M.D., Platteville, Wis. Hahn., Chicago, 1879.
1869 RICHARDS, GEORGE W., M.D 1881.*
1866 RICHARDS, JOHN C., M.D. 1872.*
1887 RICHARDS, L. B., M.D., Stafford Springs, Conn. Mich. Univ., 1881.
1882 RICHARDSON, A. S., M.D. 1883.*
1872 RICHARDSON, BRADBURY M., M D., New York. N. Y. Hom., 1865.
1847 RICHARDSON, EDWARD T., M.D., died Aug. 14th, 1881, æt. 67. Tr. '82, 133.
1886 RICHARDSON, FRANK CHASE, M.D., E. Boston, Mass. Boston Univ., 1879.
1876 RICHARDSON, WM. CONKLIN, M.D., St. Louis, Mo. Hom, Mo., 1868.
1883 RIDGE, JONATHAN T., M.D., Philadelphia, Pa. Hahn., Phila., 1882.
1887 RIGGS, D. H., M.D., Washington, D. C. N. Y. Hom., 1882.
1887 RILE, J. HARMER, M.D., Wilmington, Del. Hahn., Phila., 1879.
1878 RINEHART, CLARENCE C., M.D. 1879.*
1869 RING, ALLEN MOTT, M.D. 1874.*
1869 RITTENHOUSE, SAMUEL R., M.D. 1869.*
1856 ROBERTS, E. W., M.D., died November 10th, 1865, æt. 58. Tr. 67, 158.
1881 ROBERTS, GEORGE F., M.D., Minneapolis, Minn. Rush Med., Chicago, 1874.
1847 ROBERTS, J., M.D., died March 15th, 1856, æt. 72. Tr. '67, 158, '68, 286.
1877 ROBERTS, WILLIAM P., M.D. 1877.*
1873 ROBERTSON, EWING WELCH, M.D., elected 1869; re-elected. 1881.*
1875 ROBERTSON, GEORGE A., M.D. 1885.*
1869 ROBINSON, CHARLES F., M.D. 1881.*
1872 ROBINSON, HENRY D., M.D., died Nov. 22d, 1876, æt. 78. Tr. '78, 1121.
1844 ROBINSON, HORATIO, M.D., Auburn, N. Y. Berkshire Med. Coll., 1825.
1881 ROBINSON, HORATIO, JR., M.D., elected 1866. 1881.*
1887 ROBINSON, JAMES B., M.D., Boston, Mass. Hahn., Phila., 1881.
1872 ROBINSON, J. BLAKE, M.D. 1873.*

1875 ROBINSON, JOHN T., M.D., Warsaw, Ky. Clev. Hom., 1861.
1866 ROBINSON, SAMUEL ADAMS WEST, M.D., New Brighton, N. Y. Clev. Hom., 1858.
1888 ROBINSON, WILHELMUS B., M.D., Easthampton, Mass. N. Y. Hom., 1888.
1884 ROBSON, JOHN W., M.D., Pittsburgh, Pa. Hahn., Phila., 1877.
1880 ROCHE, EDWARD P., M.D. 1884.*
1848 ROCHE, MANNING B., M.D., died July 3d, 1862, æt. 72. Tr. '67, 158; '70, 656.
1881 ROCKWELL, JOHN ARNOLD, M.D., Norwich, Conn. Boston Univ., 1877.
1869 ROCKWITH, FRANK A., M.D. 1875.*
1849 RODMAN, WM. WOODBRIDGE, M.D., New Haven, Conn. Jeff., Phila., 1844.
1886 ROGERS, CLARA HANNAH, M.D. 1886.*
1886 ROLLINS, CHARLOTTE ABBIE, M.D., E. Boston, Mass. Boston Univ., 1879.
1846 ROMIG, JONATHAN, M.D., died February, 1885, æt. 81.
1869 RORABACHER, MILES, M.D. 1876.*
1852 ROSA, LEMUEL K., M.D., died Feb. 29th, 1853, æt. 27. Tr. '67, 158; '54, 73.
1845 ROSA, STORM, M.D., died May 3d, 1864, æt. 73. Tr. '67, 158; '68, 286; '70, 656.
1881 ROSE, HENRY W., M.D. 1881.*
1867 ROSE, JOHN F., M.D. 1867.*
1872 ROSEBERRY, CHARLES J., M.D., elected 1869.* 1879.*
1882 ROSENBERGER, ABRAHAM S., M.D., Covington, O. Clev. Hom., 1870.
1858 ROSMAN, JOHN GAUL, M.D., resigned 1875.
1845 ROSMAN, ROBERT, M.D., died December 25th, 1859, æt. 54. Tr. '68, 286.
1883 ROSS, GEORGE A., M.D., Fort Wayne, Ind. Pulte, Cin., 1879.
1879 ROSS, ORIN G., M.D., died April 29th, 1885, æt. 42. Tr. '86. 144.
1886 ROUNSEVEL, C. SEDGWICK, M.D., Nashua, N. H. Hahn., Phil., 1882.
1883 ROUSSEAU, LOUIS GODFREY, M.D., Pittsburgh, Pa. Clev. Hom., 1883.
1866 ROUSSEAU, LOUIS MAJORQUE, M.D., died September 25th, 1882, æt. 62. Tr. '83, 152.
1875 ROWELL, CHARLES E., M.D. 1881.*
1872 ROWSEY, WILLIAM THOMAS, M.D. 1877.*
1846 ROYSTON, T. P., M.D., died 1852. Tr. '67, 158.
1881 RUGGLES, WILLARD OSMAN, M.D. 1885.*
1875 RUKENBROD, WALTER E., M.D. 1879.*
1875 RUNNELS, MOSES THURSTON, M.D., Kansas City, Mo. Clev. Hom, 1874.
1873 RUNNELS, ORANGE SCOTT, M.D., Indianapolis, Ind. Clev. Hom., 1871.
1887 RUNNELS, SOLLIS, M.D., Indianapolis, Ind. Chicago Hom., 1887.
1869 RUNNER, REUBEN CALEB, M.D. 1874.*
1865 RUSH, ROBERT B., M.D., Salem, O.
1880 RUSHMORE, EDWARD, M.D., Plainfield, N. J. Jeff., Phil., 1872.
1880 RUSSEGUE, HENRY ELMORE, M.D., Hartford, Conn. Boston Univ., 1878.
1886 RUSSEL, CLARA L., M.D., St. Louis, Mo. Chicago Hom., 1883.
1848 RUSSEL, GEORGE, M.D., died February 18th, 1883, æt. 88. Tr. '83, 141.
1881 RUSSEL, J. EDWIN, M.D. 1888.*
1873 RUST, JAMES, M D. 1872.*
1872 SAFFORD, MARY J, M.D., resigned 1887.
1869 SAGE, WILLIAM H., M.D., New Haven, Conn. Yale, 1849.
1860 SAMSON, CHARLES M., M.D., died 1862. Tr. '67, 158; '70, 656.

1854 SANBORN, BENAIAH, M.D., died October 4th, 1867, æt. 67. Tr. '68, 286.
1860 SANDERS, JOHN CHAPIN, M.D., Cleveland, O. Clev. Med., 1849.
1884 SANDERS, J. KENT, M.D. 1888.*
1859 SANDERS, ORREN STRONG, M.D., Boston, Mass. Vermont Univ., 1843.
1867 SANDERS, WILLIAM HENRY, M.D. 1867.*
1867 SANFORD, CHARLES E., M.D., Bridgeport, Conn. Yale, 1853.
1869 SANFORD, ENOCH W., M.D., died February, 1875.
1869 SANGER, THADDEUS E., M.D. 1880.*
1854 SARGENT, RUFUS, M.D., died April 10, 1887, æt. 63. Tr. '87, 215.
1871 SARTAIN, HARRIET JUDD, M.D., Philadelphia, Pa. Eclect., Cin., 1854.
1859 SAUNDERS, C. F., M.D., died January 4, 1862, æt. 29. Tr. '67, 158.
1870 SAUNDERS, WILLIAM E., M.D., died March 7th, 1875, æt. 36.
1870 SAVAGE, JAMES W., M.D. 1879.*
1867 SAWIN, ISAAC WARREN, M.D., Providence, R. I. Clev. Hom., 1857.
1869 SAWTELLE, GEORGE B., M.D. 1878.*
1878 SAWYER, ALFRED ISAAC, M.D., Monroe, Mich. Clev. Hom., 1854.
1847 SAWYER, BENJAMIN EDWARDS, M.D. 1885.*
1886 SAWYER, E. W., M.D. 1886.*
1874 SAXTON, WILLIAM DWIGHT, M.D. 1874.*
1867 SCALES, EDWARD PAYSON, M.D., Newton, Mass. Clev. Hom., 1869.
1859 SCALES, THOMAS SPENCER, M.D., died June 15, 1881, æt. 59. Tr. '82, 141.
1846 SCEITZ, OSCAR, M.D. 1867.*
1873 SCHATZ, WILLIAM F., M.D. 1878.*
1874 SCHENCK, BENJAMIN BAIRD, M.D., died March 22, 1883, æt. 74.
1874 SCHERZER, WILLIAM, M.D., died February 21, 1882, æt. 57. Tr. '82, 144.
1873 SCHEURER, E. M., M.D., Clearfield, Pa. Hahn., Phil., 1871.
1882 SCHLEY, EDWARD B., M.D., Columbus, Ga. N. Y Hom., 1861.
1875 SCHLEY, JAMES MONTFORD, M.D., New York. Sav. Med. Col., 1871.
1883 SCHLEY, PHILIP T., M.D., Brooklyn, N. Y. N. Y. Hom., 1866.
1846 SCHMIDT, JACOB, M.D., died March 20, 1880, æt. 67. Tr. '81, 120.
1869 SCHMIDT, JOHN, M.D. 1869.*
1881 SCHMITT, JULIUS G., M.D., Rochester, N. Y. Penn. Univ., 1872.
1846 SCHMOELE, H., M.D. 1867.*
1873 SCHMUCKER, ELHANAN ZOOK, M.D., Reading, Pa. Hahn., Phil., 1870.
1873 SCHMUCKER, FRANCIS R., M.D., resigned 1877.
1868 SCHNEIDER, NATHANIEL, M.D., Cleveland, O., elected 1866. Clev. Hom., 1864.
1881 SCHREINER, EMMA TALBERT, M.D., Philadelphia, Pa. Mich. Univ., 1880.
1846 SCHUE, JOHN, M.D., died September, 1856. Tr. '67, 158; '68, 286.
1846 SCHWARZ, GUSTAVUS, M.D., died April 28, 1863, æt. 67. Tr. '67, 158.
1872 SCOTT, CHESTER WALTER, M.D., Lawrence, Mass. Hom., Pa., 1854.
1860 SCOTT, JAMES L., M.D., died August 15, 1876, æt. 38. Tr. '77, 992.
1878 SCOTT, JOHN P., M.D. 1878.*
1881 SCOTT, SAMUEL C., M.D., elected 1878.* 1885.*
1886 SCOTT, WILLIAM H., M.D., New York. Berkshire Med. Col., 1862.
1869 SEEGER, FERDINAND, M.D. 1869.* Name in Cat. 1872, '73, '74, '75.*
1867 SEELEY, N. R., M.D., died March 4, 1888, æt. 54. Tr. '88, 224.

1868 SEIDLITZ, GEORGE N., M.D. 1881.*
1869 SEIP, CHRISTIAN P., M.D., Pittsburgh, Pa. Hahn., Phil., 1868.
1875 SELFRIDGE, JAMES M., M.D., Oakland, Cal. Buffalo Univ., 1852.
1876 SEWARD, JOHN LEDDELL, M.D., Orange, N. J. Hahn., Phil., 1873.
1874 SEYMOUR, ABBIE J., M.D. 1881.*
1867 SEYMOUR, DENISON E., M.D., 1878.*
1847 SHACKFORD, RUFUS, M.D., Portland, Me. Harvard, 1845.
1867 SHAFFER, LEVI, M.D. 1881.*
1879 SHANNON, SAMUEL FREW., M.D., Sewickley, Pa. Hahn., Phil., 1879.
1859 SHATTUCK, ALVIN, M.D., died August 16, 1872, æt. 51. Tr. '73, 511.
1867 SHATTUCK, HENRY P., M.D. 1874.*
1875 SHAW, GEORGE R., M.D. 1881.*
1867 SHEARER, THOMAS, M.D., Baltimore, Md. Hahn., Phil., 1859.
1882 SHEARS, GEORGE FRANCIS, M.D., Chicago, Ill. Hahn., Chicago, 1880.
1854 SHEEK, JACOB F., M.D., died January 31, 1858. Tr. '67, 158.
1866 SHEFFIELD, HENRY, resigned 1880.
1870 SHELDON, JAY W., M.D., Syracuse, N. Y. Clev. Hom., 1864.
1886 SHELTON, GEORGE G., M.D., New York. N. Y. Hom., 1883.
1881 SHENSTONE, B. C., M D., Brooklyn, N. Y. N. Y. Hom., 1878.
1865 SHEPHERD, ALFRED, M.D., Glendale, O. In the list of Seniors as 1846.
1871 SHEPHERD, JAMES S, M.D., Petaluma, Cal. Hahn., Phil., 1866.
1846 SHEPPARD, DAVID, M.D., deceased. Tr. '67, 158.
1859 SHERMAN, JOHN HOWARD, M.D., Boston, Mass. Vermont Univ., 1857.
1875 SHERMAN, LEWIS, M.D. Milwaukee, Wis. N. Y. Univ., 1870.
1879 SHERMAN, SARAH EVA, M D., Salem, Mass. Boston Univ., 1876.
1846 SHERRILL, HUNTING, M.D, died January 16, 1866, æt. 83. Tr. '67, 158; '68, 286; '70, 657.
1882 SHERWOOD, HERBERT ALTON, M.D., Warren, O. Clev. Hom., 1876.
1857 SHIPMAN, GEORGE E., M.D., Chicago, Ill. N. Y. Phys. and Surgs., 1843.
1871 SHIVERS, BOWMAN H., M.D., Haddonfield, N. J. Penn. Univ., 1858.
1884 SHORT, SUSAN DOWNER, M.D., Boston, Mass. Boston Univ., 1881.
1871 SHREVE, JOSEPH, M.D. 1876.*
1857 SILL, JOSEPH, M.D. 1867.*
1881 SIMMONS, DANIEL, M.D., Brooklyn, N. Y. N. Y. Hom., 1873.
1888 SIMMONS, SILAS S., M.D., Susquehanna, Pa. Vermont Univ., 1860.
1881 SIMON, SAMUEL H., M.D., Harrisburg, Pa. Hahn., Phil., 1880.
1844 SIMS, FRANCIS, M.D., died November 29, 1880, æt. 57.
1854 SISSON, EDWARD R, M.D., New Bedford. Berkshire, 1853; Hahn., Phila., 1854.
1867 SISSON, WILLIAM H. H., M.D., died January 25, 1873. Tr. '73, 513.
1867 SKEELS, A. P., M.D. 1873.*
1846 SKIFF, CHARLES H., M.D., died December 11, 1875, æt. 67. Tr. '77, 974.
1869 SKIFF, PAUL C., M.D 1875.*
1853 SKILES, FRANCIS W., M.D., Brooklyn, N. Y. Clev. Hom., 1852.
1876 SKINNER, THOMAS, M.D., London, Eng. Corresponding.
1875 SKINNEY, ANDREW B., M.D. 1875.*
1883 SLAUGHT, JAMES EUGENE, M.D., Hamilton, N. Y. Clev. Hom., 1878.
1867 SLOAN, HENRY S., M.D. 1875.*

1869 SLOCUMB, CHRISTOPHER COLUMBUS, M.D. 1875.*
1857 SLOCUM, MORTIMER, M.D. 1867.*
1879 SLOCUM, ROYAL, M.D., Easton, N. Y. Bellev. Hosp., M. C., 1871.
1881 SLOUGH, EVAN, M.D. 1886.*
1876 SLOUGH, FRANK J., M.D., Allentown, Pa. Hom., Pa., 1862.
1888 SLOUGH, WILLIAM C. J., M.D., Emaus, Pa. Hahn., Phil., 1869.
1846 SMALL, ALVAN E., M.D., died December 31, 1886, æt. 75. Tr. '87, 198.
1868 SMALL, ALVAN E., JR., M.D. 1875.*
1868 SMALL, HENRY N., 1875.*
1866 SMEDLEY, ROBERT C., M.D., died January 2, 1883.
1869 SMITH, AMOS B., M.D. 1877.*
1869 SMITH, CHARLES C., M.D. 1869.*
1873 SMITH, CHESTER, M.D., Portland, Mich. Clev. Hom., 1859.
1866 SMITH, DANIEL DROWNE, M.D., died March 17, 1878, æt. 71.
1846 SMITH, DAVID SHEPPARD, M.D., Chicago, Ill. Jeff., Phil., 1836.
1846 SMITH, EDWARD M., M.D. 1868.*
1880 SMITH, EDWIN, M.D. 1880.*
1888 SMITH, ERNEST B., M.D., Union City, Pa. Clev. Hom., 1882.
1869 SMITH, EZRA P. K., M.D., died December 27, 1874, æt. 57.
1870 SMITH, FRANKLIN B., M.D. 1874.*
1852 SMITH, HAMILTON L., M.D. 1867.*
1860 SMITH, HENRY MITCHELL, M.D., New York. N. Y. Med., 1860.
1879 SMITH, JUSTIN EDWARDS, M.D., Cleveland, O. Clev. Hom., 1877.
1869 SMITH, J. HEBER, M.D., Boston, Mass. Hahn., Phil., 1866.
1846 SMITH, J. O., M.D. 1848.*
1860 SMITH, J. W., JR., M.D., deceased. Tr. '68, 287.
1876 SMITH, JOHN MILLER, M.D. 1881.*
1870 SMITH, JOHN T. S., M.D., died October 3, 1876, æt. 71. Tr. '77, 987.
1872 SMITH, JOSEPHINE S., M.D. 1872.*
1882 SMITH, JULIA HOLMES, M.D., Chicago, Ill. Chicago Hom., 1879.
1876 SMITH, LINNEUS A., M.D., resigned 1879.
1876 SMITH, LUTHER W., M.D., died June 24, 1879.
1887 SMITH, MELVIN D., M.D., Middlebury, Vt. Hahn., Chicago, 1884.
1885 SMITH, NORMAN PITT, M.D., Paris, Ill. Hahn., Chicago, 1881.
1886 SMITH, SARAH N., M.D., New York. Wom. H. M. C., 1877.
1869 SMITH, STEBBINS A., M.D., deceased.
1869 SMITH, ST. CLAIR, M.D., New York. N. Y. Hom., 1869.
1871 SMITH, T. HART., M.D. 1877.*
1860 SMITH, THOMAS FRANKLIN, M.D., New York. N. Y. Med., 1860.
1867 SMITH, WILLIAM H., M.D., died February 11, 1880.
1844 SNOW, ROBERT ALBERT, M.D., died October 4, 1849. Tr. '50, 50; '67, 158.
1887 SNYDER, EDWARD E., M.D., Binghamton, N. Y. Hahn., Phil., 1872.
1867 SOMMER, GUSTAVE J. M., M.D., deceased.
1867 SONNENSCHMIDT, CHARLES W., M.D. 1878.*
1869 SOOK, HENRY L., M.D. 1874.*
1881 SOUTH, EPHRAIM W., M.D., died April 8, 1888, æt. 53. Tr. '88, 231.
1887 SOUTHGATE, ROBERT WILSON, M.D., Rockland, Mass. Bost. Univ., 1881.
1871 SOUTHWICK, AUGUSTUS B., M.D., Rome, N. Y. Hahn., Phil., 1867.

1868 SOUTHWICK, DAVID E., M.D., Ogdensburg, N. Y. Hahn., Phil., 1857.
1888 SOUTHWICK, GEORGE R., M.D., Boston, Mass. Boston Univ., 1881.
1874 SOVEREIGN, BAXTER, M.D. 1881.*
1844 SPALDING, ———, M.D. 1848.*
1869 SPALDING, HENRY EDWIN, M.D., Hingham, Mass. N. Y. Hom., 1866.
1859 SPARHAWK, GEORGE E. E., M.D, Burlington, Vt. Hahn., Phil., 1853.
1877 SPEAKMAN, RACHEL T., M.D., Wellesley, Mass. Clev., Hom., 1863.
1859 SPENCER, CHARLES L., M.D. 1872.*
1875 SPINNEY, ANDREW B., M.D., Ypsilanti, Mich. Clev. Hom., 1859.
1874 SPITTLE, THOMAS F., M D. 1874.*
1869 SPOONER, EDWARD H., M.D. 1869.*
1872 SPOONER, GEORGE R., M.D. 1872.*
1887 SPOOR, DAVID E., M D., Schenectady, N. Y. Hahn., Chicago, 1887.
1876 SPRANGER, FRANCIS, M.D. 1876.*
1882 SPRENG, THEO. F. H., M.D., Buchanan, Mich. Hahn., Chicago, 1879.
1850 SPRINGSTEED, DAVID, M.D., New York.
1868 SQUIER, A. F., M.D. 1877.*
1881 STANFORD, FLORA HAYWARD, M.D., Washington, D.C. Boston Univ., 1878.
1848 STANSBURY, ROBERT MOTT, M.D. Died Nov. 5, 1850, æt. 43. Tr. '52, 43.
1860 STARKEY, GEORGE R., M.D. 1873.*
1853 STARR, CALVIN, M.D. 1867.*
1869 STEARNS, GEORGE W., M.D. 1881.*
1886 STEARNS, MELVIN J., M.D., Massena, N. Y. Hahn., Chicago, 1880.
1869 STEBBINS, JAMES H, M.D. 1874.*
1848 STEBBINS, N., M.D., deceased. Tr. '67, 159.
1869 STEELE, JOHN ANDREW, M.D. 1875.*
1860 STEHMAN, JACOB S., M.D., deceased. Tr. '67, 159.
1846 STEVENS, CHARLES A., M.D., died January 17, 1881, æt. 63. Tr. '81, 119.
1856 STEVENS, GRENVILLE SMITH, M.D. 1871.*
1870 STEVENSON, HENRY C., M.D. 1878.*
1852 STEVENSON, THOMAS COLLINS, M.D., died December 19, 1879. Tr. '81, 123.
1866 STEWART, JACOB, M.D. 1873 *
1887 STEWART, MARY E., M.D., Saratoga Springs, N. Y. Hahn., Chicago, 1886.
1888 STEWART, THOMAS M., M.D., Cincinnati, Ohio. Pulte Med. Cin., 1887.
1874 STILES, HENRY REED, M.D. 1878.*
1871 STILES, JAMES E., M.D., Lambertville, N. J. Phil. Univ., 1865.
1860 STILES, WILLIAM, M.D. 1868.*
1873 STILSON, E. H., M.D. 1878.*
1885 STOAKS, FRANK ERNEST, M.D. 1887.*
1854 STONE, ALFRED B., M.D., died June 3, 1855, æt. 26. Tr. '67, 159.
1858 STONE, HENRY E., M.D., died January 27, 1886, æt. 66. Tr. '86, 128.
1879 STONE, MARTHA M., M.D., Cleveland, Ohio. Clev. Hom., 1877.
1887 STONE, WALDO HODGES, M.D., Providence, R. I. Boston Univ., 1882.
1880 STORKE, EUGENE F., M.D., Milwaukee, Wis. Hahn., Chicago, 1874.
1871 STOUFFER, DAVID R., M.D., died March 16, 1874, æt. 24. Tr. '74, 665.
1882 STOUT, HENRY R., M.D., Jacksonville, Fla. Hahn., Chicago, 1868, elected 1870. 1874.*
1882 STOVER, WILLIAM H., M.D., Tiffin, Ohio. Detroit Hom., 1874.

1869 STOW, TIMOTHY DWIGHT, M.D. 1881.*
1881 STREETER, JOHN W., M.D., elected. 1869*; re-elected 1875.*
1871 STREETS, JACOB G., M.D., Bridgeton, N. J. Hahn., Phil., 1866.
1853 STRETCH, JOSHUA B., M.D., died March 7, 1865, æt. 40. Tr. '66, 154.
1869 STRONG, O. G., M.D. 1881.*
1880 STRONG, THOMAS MORRIS, M.D., New York. N. Y. Hom., 1871.
1888 STRUNK, EDWARD P., M.D., Brewster, N. Y. N. Y. Hom., 1874.
1869 STUARD, E. S., M.D. 1869.*
1883 STUMPF, DANIEL BERNARD, M.D., Buffalo, N. Y. Clev. Hom., 1876.
1865 STRUM, WILLIAM, M.D. 1869.*
1881 STURTEVANT, CHARLES, M.D., Hyde Park, Mass. Harvard, 1862.
1887 STURTEVANT, LOMAN P., M D., Conneaut, Ohio. Clev. Hom., 1874.
1870 STURTEVANT, THOMAS, M.D. 1871.*
1846 SULLIVAN, JOHN L., M.D., died, æt. 79. Tr. '67, 159.
1865 SUMNER, CHARLES, M.D., died May 5, 1888, æt. 61. Tr. '88, 223.
1876 SUMNER, ALBERT E., M.D., died August 31, 1882, æt. 42. Tr. '83, 159.
1881 SUMNER, CHARLES R., M.D., Rochester, N. Y. N. Y. Hom., 1877.
1887 SUTHERLAND, JOHN PRESTON, M.D., Boston, Mass. Boston Univ., 1879.
1880 SWAIN, MARY LIZZIE, M.D., Boston, Mass. Boston Univ., 1877.
1887 SWALON, THOMAS W., M.D., Pottsville, Pa. N. Y. Hom., 1878.
1848 SWAN, DANIEL, M.D., died December 5, 1864, æt. 83, Tr. '66, 153.
1867 SWAN, SAMUEL, M.D. 1886.*
1879 SWARTZ, JOHN ROSS, M.D., Harrisburg, Pa. Hahn., Phil., 1879.
1844 SWAZEY, GEORGE W., M.D., died September 8, 1877, æt. 65. Tr. '78, 1107.
1887 SWETT, EMILY F, M.D., Medina, N. Y. Hahn., Chicago, 1885.
1874 SWIFT, CHARLES E., M.D., deceased.
1880 SWIFT, EVERETT M., M.D. 1887.*
1867 SWIFT, SOLOMON EVEREST, M.D. 1881.*
1887 SWINNEY, CURTIS O., M.D., Smyrna, Del. Hahn., Phil., 1878.
1869 SWITZ, HARMANN, M.D., died June 25, 1883, æt. 65. Tr. '84, 664.
1881 SYLVESTER, STEPHEN ALDEN, M.D. 1885.*
1848 TAFT, CINCINNATUS A., M.D., died June 26, 1884, æt. 62. Tr. '86, 125.
1844 TAFT, GUSTAVUS M., M.D., died August 9, 1847. Tr. '67, 159.
1888 TALBOT, GEORGE H., M.D., Newtonville, Mass. Boston Univ., 1882.
1853 TALBOT, ISRAEL TISDALE, M.D., Boston, Mass. Hom., Penna., 1853.
1887 TALBOT, MRS. EMILY, M.D., Boston, Mass. Honorary associate.
1874 TALCOTT, SELDEN HAINES, M.D., Middletown, N. Y. N. Y. Hom., 1872.
1872 TALMAGE, JOHN F., M.D., Brooklyn, N. Y. N. Y. Univ., 1859.
1871 TANTUM, JOSEPH R., M.D., Wilmington, Del. Hahn., Phil., 1865.
1848 TARBELL, JOHN A., M.D., died January 21, 1864, æt. 53. Tr. '66, 150.
1869 TAYLOR, CHARLES W., M.D., died January 1, 1875, æt. 55. Tr. '77, 990.
1875 TAYLOR, ESTHER W., M.D., Boston, Mass. Hahn., Chicago, 1872.
1881 TAYLOR, GEORGE H., M.D., N. Y. N. Y. Med., 1852.
1880 TAYLOR, HENRY W., M.D. 1886.*
1844 TAYLOR, JOHN, M.D., died April 5, 1850, æt. 45. Tr. '50, 30; '51. 11; '67, 159.
1885 TAYLOR, JOHN N., M.D. 1885.*
1882 TAYLOR, THEODORE HOMER, M.D., Evansville, Ind. Hom., Clev., 1882.
1868 TEMPLE, JOHN TAYLOR, M.D., deceased.

1872 TERRY, J. ANTONIO, M.D. 1872.*
1875 TERRY, MARSHALL ORLANDO, M.D., Utica, N. Y. Clev. Hom., 1872.
1888 THAYER, CHARLES EDWARD, M.D., Minneapolis, Minn. Chic. Hom., 1886.
1847 THAYER, DAVID, M.D., Boston, Mass. Berkshire, 1843.
1869 THAYER, S. B., M.D., died September 16, 1874.
1869 THOMAI, AMOS RUSSELL, M.D., Philadelphia, Pa. Syracuse Med., 1854.
1875 THOMAS, CHARLES MONROE, M.D., Philadelphia, Pa. Hahn., Phil., 1871.
1860 THOMAS, EDGAR B., M.D. 1874.*
1870 THOMAS, FRANK H., M D. 1871.*
1871 THOMAS, WILLIAM W., M.D., resigned 1881.
1887 THOME, ARTHUR G, M.D., Chicago, Ill. Chicago Hom., 1883.
1888 THOMPSON, CHARLES S. W., M D, Helena, M.T. Hahn., Phil., 1880
1879 THOMPSON, MRS. ELIZABETH, M D., New York Honorary Associate.
1887 THOMPSON, JAMES HENRY, M.D., Pittsburgh, Pa. Hahn., Chicago, 1886.
1867 THOMPSON, JOHN H., M.D., New York. N Y. Med, 1863
1887 THOMPSON, LANDRETH W., M.D., Phil., Pa. Hahn., Chicago, 1887.
1867 THOMPSON, VIRGIL, M.D., New York. N. Y. Hom., 1862.
1859 THOMPSON, W. L., M.D. 1874.*
1856 THORNE, JOSHUA, M.D. 1867.*
1872 TIBBLES, GEORGE N., M.D. 1877.*
1853 TIFFT, JOHN, M.D., resigned 1866.
1881 TILDEN, JOHN NEWELL, M.D, Peekskill, N. Y. L. I. Col., 1872.
1860 TINDALL, DANIEL M., M.D. 1868.*
1867 TINKER, MARTIN A., M.D. 1868.*
1881 TITSWORTH, RANDOLPH, M.D, Plainfield, N. J. Hom., Phil., 1853. Elected, 1853. Re-elected.
1887 TOBEY, WALTER HENRY, M.D., Boston, Mass. N. Y. Hom., 1874.
1885 TOMPKINS, ALBERT HENRY, M.D., Jamaica Plain, Mass. Bost. Univ., 1875.
1867 TOMPKINS, SILAS BYRON, M.D.* 1876.*
1879 TOOKER, ROBERT NEWTON, M.D., Chicago, Ill. Bellevue Hosp., N.Y., 1865.
1860 TOOTHAKER, CHARLES E., M.D. 1877.*
1886 TOWNER, HARRY L, M.D., Athens, Pa. Chicago Hom., 1879.
1866 TOWNSEND, ENOCH WRIGHT, M.D., Greensburg, Pa. Clev. Hom., 1853.
1847 TRAIN, HORACE DWIGHT, M D., died April 24, 1879, æt. 58.
1881 TRAVER, GILBERT RYERSON, M.D. 1885.*
1860 TRITES, DAVID TRAINER, M.D. 1876.*
1869 TRITES, WILLIAM BUDD, M.D. 1885.*
1870 TROTT, STINSON E., M D. 1876.*
1888 TROTTER, RICHARD R., M.D., Yonkers, N. Y. Boston Univ., 1877.
1888 TUCKER, GENEVIEVE, M.D., Northfield, Minn. Mich. Univ., 1880.
1869 TUCKER, HENRY, M.D. 1874.*
187- TUCKER, SAMUEL GIBBS, M.D., resigned 1885.
1878 TULLER, EMORY R., M.D., Vineland, N. J. Clev. Hom., 1862.
1858 TURNER, JOHN, M.D., 1873.*
1873 TURNER, REUBEN F., M.D. 1873.*
1860 TURRILL, GEORGE S., M.D. 1867.*
1853 TURRILL, M. Y., M D. 1872.*
1886 TUTTLE, WALTER, M.D. 1887.*

1849 TYSON, HENRY, M.D. 1867.*
1881 TYTLER, GEORGE EDWIN, M.D., New York. N. Y. Hom., 1873.
1881 UEBELACKER, ARMIN E., M.D., Morristown, N. J. N. Y. Hom., 1871.
1875 UNDERWOOD, HELEN J., M.D. 1881.*
1867 URE, WALTER, M D. 1869.*
1876 VAIL, JOHN D., M.D., Montrose, Pa. Berk. Med., 1855.
1875 VALENTINE, PHILO G., M.D., died December 22, 1884, æt. 52. Tr. '85, 111.
1886 VAN ALSTYNE, FRANK W., M.D., West Troy, N. Y. N. Y. Hom., 1886.
1881 VANARTSDALEN, CHRISTOPHER, M.D. 1886.*
1884 VAN CLEEF, CHARLES EDWARD, M.D., Ithaca, N. Y. N. Y. Hom., 1874.
1887 VAN DENBURGH, M. W., M.D., Fort Edward, N. Y. N. Y. Univ., 1879.
1850 VANDERBURG, FEDERAL, M.D., died January 23, 1868, æt. 80. Tr. '70, 122.
1878 VAN DERZEE, WILLIAM H., M.D., died August 29, 1883, æt. 26.
1876 VAN DEUSEN, JOSEPHINE, M.D., resigned 1880.
1886 VAN LENNEP, WILLIAM BIRD, M.D., Philadelphia, Pa. Hahn., Phil., 1880.
1870 VAN LIEW, F. H., M.D. 1875.*
1873 VAN NORMAN, E. V., M.D., Springfield, O. Clev. Hom., 1870.
1870 VAN NORMAN, HORACE BLACK, M.D., Cleveland, O. Clev. Hom., 1864.
1876 VAN VLECK, PETER H., M.D., Sturgis, Mich. St. Louis Col., 1865.
1876 VARONA, ADOLPH, died February 10, 1888, æt. 48.
1868 VASTINE, CHARLES, M.D. 1878.*
1851 VASTINE, P. E., M D., died April, 1857. Tr. '67, 159; '68, 287.
1868 VASTINE, THOMAS JEFFERSON, M.D., died Mch., 1873, æt. 64. Tr. '74, 668.
1866 VERDI, CIRO SUZZARA, M.D., deceased.
1858 VERDI, TULLIO SUZZARA, M.D., Washington, D. C. Hahn., Phil., 1856.
1874 VERNON, ELIAS, M.D. 1878.*
1869 VIETZ, E. W., M D. 1874.*
1848 VINAL, L. G., M.D. 1872.*
1871 VINCENT, FRANK L., M D., Clifton Springs, N. Y. Hahn., Chicago, 1861.
1876 VINCENT, JOHN A., M.D. 1886.*
1877 VILAS, CHARLES HARRISON, M.D., Chicago, Ill. Hahn., Chicago, 1873.
1881 VISHNO, CHARLES, M.D., New Haven, Conn. N. Y. Hom., 1866.
1874 VOAK, JOSEPH BENSON, M.D. 1874.*
1871 VON TAGEN, CHARLES H., M.D., died July 29, 1880, æt. 45.
1852 WACK, PHILLIS, M.D. 1866.*
1858 WACKERBARTH, T. VON, M.D. 1869.*
1867 WADSWORTH, TIMOTHY D., M.D. 1875.*
1881 WAGE, JOHN F., M.D., Buffalo, N. Y. Detroit Hom., 1874.
1874 WAITE, PHŒBE J. B., M D., New York. N. Y. Women's, 1872.
1877 WALDO, HOWARD L., M.D. 1877.*
1870 WALES, R. P., M.D. 1876.*
1853 WALKER, AMOS, M.D., retired from practice.
1886 WALKER, CATHERINE, M.D., Fredonia, N. Y. Hahn., Chicago, 1885.
1848 WALKER, CHARLES, M.D., died Jan. 17, 1855, æt. 52. Tr. '67, 159; '68, 287.
1854 WALKER, CHARLES HENRY, M.D., died Oct. 4, 1887, æt. 65. Tr. '88, 221.
1880 WALKER, GEORGE STODDART, M.D. 1887.*
1888 WALKER, JAMES M., M.D., Denver, Col. St. Louis Phys. and Surg., 1871.
1869 WALKER, MAHLON M., M.D., Philadelphia, Pa. Hahn., Phil., 1867.

1885 WALKER, PELEG FRANCIS, M.D., Providence, R. I. Boston Univ., 1881.
1865 WALLACE, M. W., M.D. 1881.*
1869 WALLENS, MILES W., M.D., died January 4, 1874, æt. 32. Tr. '74, 664.
1883 WALSH, CHARLES A., M.D., Detroit, Mich. Hahn., Chicago, 1882.
1856 WALTER, JOSEPH S., M.D. 1859.*
1872 WALTER, ZIBA D., M.D., Marietta, Ohio. Hom., Penn., 1866.
1874 WALTON, CHARLES E., M.D., Hamilton, Ohio. Pulte, Cin., 1874.
1883 WANSTALL, ALFRED, M D., Baltimore, Md. N. Y. Hom., 1875; elected 1877.
1874 WARD, ALVA FRANCIS, M.D. 1885.*
1846 WARD, ISAAC M., M.D., Newark, N. J. Rutgers, N. Y.
1872 WARD, JAMES H., M.D. 1881.*
1883 WARD, JAMES WILLIAM, M.D., San Francisco, Cal. N. Y. Hom., 1883.
1855 WARD, JOHN AUGUSTINE, M.D., died March 5, 1880, æt. 54. Tr. '80, 156.
1857 WARD, JOSEPH B., M.D. 1874.*
1846 WARD, P., M.D. 1852.*
1846 WARD, WALTER, M.D., died March 29, 1888, æt. 72. Tr. '88, 211.
1869 WARE, WILLIAM G., M.D., Dedham, Mass. Clev. Hom., 1866.
1873 WARREN, H. ANNA, M.D., Chattanooga, Tenn. Clev. Hom., 1863.
1882 WARREN, HENRY M., M.D. Hom., Clev., 1865.
1872 WARREN, JOHN K., M.D., Worcester, Mass. N. Y. Hom., 1870.
1848 WARNER, LEWIS T., M.D., deceased.
1853 WARNER, NOAH H., M.D., died June 24, 1860, æt. 52. Tr. '67, 159.
1874 WATERS, HENRY, M.D., died November 6, 1874, æt. 26. Tr. '75, 807.
1873 WATERS, MOSES H., M.D., Terre Haute, Ind. N. Y. Hom., 1865.
1874 WATSON, HENRY B., M.D. 1879.*
1858 WATSON, JAMES L., M.D. 1868.*
1881 WATSON, THOMAS M., M.D. 1887.*
1854 WATSON, WILLIAM HENRY, M.D., Utica, N. Y. Hahn., Phil., 1854.
1882 WEAVER, CHANDLER, M.D., Philadelphia, Pa. Hahn., Phil., 1879.
1867 WEBB, E. COOK, M.D. 1875.*
1881 WEBSTER, FRANK P., M.D., Norfolk, Va. Hahn., Phil., 1879.
1865 WEBSTER, W., M.D., Dayton, O. Eclect., Cin., 1857.
1859 WEEKS, BENJAMIN, M.D. 1867.*
1869 WEEKS, LORRAIN T., M.D., died July 19, 1876, æt. 57. Tr. '78, 1121.
1879 WEEKS, WALTER HUBBARD, M.D. 1879.*
1888 WELCH, GEORGE OAKES, M.D, Westborough, Mass. Boston Univ., 1887.
1881 WELCH, CLARK D., M.D. 1885.*
1846 WELD, CHRISTOPHER MINOT, M.D., died March 13, 1878, æt. 66. Tr. '70, 1882.
1876 WELLMAN, WASHINGTON IRVING, M.D. 1883.*
1848 WELLS, LUCIEN B., M.D., Utica, N. Y. Fairfield, 1832.
1844 WELLS, PHINEAS PARKHURST, M.D., Brooklyn, N. Y. Dartmouth Col., 1833.
1871 WENTWORTH, WALTER HENRY, M.D., Pittsfield, Mass.
1873 WENZ, JAMES, M.D. 1878.*
1866 WERDER, MAX. J., M.D. 1881.*
1859 WESSELHOEFT, CONRAD, M.D., Boston, Mass. Harvard, 1856.
1869 WESSELHOEFT, GEORGE P., M.D. 1874.*

1844 WESSELHOEFT, WILLIAM, M.D., died September 1, 1858, æt. 64. Tr. '67, 159; '59, 165.
1859 WESSELHOEFT, WILLIAM PALMER, M.D., Boston, Mass. Harvard, 1857.
1867 WESSELHOEFT, WALTER, M.D., Cambridge, Mass.
1869 WEST, BENJAMIN H., M.D. 1881.*
1858 WEST, EDWIN, M.D., New York. N. Y. Univ., 1849.
1873 WEST, JAMES ANSIL, M.D., Geneseo, N. Y. Hahn., Phil., 1868.
1866 WETMORE, JOHN McE., M.D., New York. N. Y. Phys. & Surgs., 1855.
1853 WHEAT, J. N., M.D., Oberlin, O.
1874 WHEATON, JAMES LUCAS, M.D., Pawtucket, R. I. Berkshire, 1847.
1867 WHEELER, ALEXANDER W., M.D. 1873.*
1888 WHEELER, AMSDEN E., M.D., Los Angeles, Cal. Clev. Hom., 1880.
1885 WHEELER, A. R., M.D., St. Louis, Mich. Mich. Univ., 1878.
1876 WHEELER, BYRON A., M.D., Denver, Col. Hahn., Chicago, 1867.
1850 WHEELER, JOHN, M.D., died February 12, 1871.
1853 WHIPPLE, A., M.D. 1867 *
1882 WHIPPLE, ALFRED A., M.D., Quincy, Ill. Hahn., Chicago, 1880.
1879 WHITCOMB, FIDELIA JANE MERRICK, M.D., Nunda, N. Y. Boston Univ., 1876.
1870 WHITE, CORNELIUS C., M.D. 1879.*
1884 WHITE, ELMER THOMAS, M.D., Connellsville, Pa. Clev. Hom., 1883.
1867 WHITE, JOSEPH RALSEY, M.D., New York. N. Y. Hom., 1870.
1869 WHITE, JOSEPH N., M.D. 1875.*
1887 WHITE, ROLAND T., M.D., Chicago, Ill. Chicago Hom., 1886.
1860 WHITE, THEODORE C., M.D., Rochester, N. Y.
1867 WHITE, W. HANFORD, M.D., New York. Eclect., Cin., 1854.
1886 WHITE, WALTER HENRY, M.D., Boston, Mass. Boston Univ., 1882.
1846 WHITEHEAD, C., M.D., died June 29, 1858, æt. 51. Tr. '67, 159; '68, 287.
1874 WHITELEY, J., M.D. 1874.*
1873 WHITFIELD, ISAIAH J., M.D., Grand Rapids, Mich. Clev. Hom., 1870.
1875 WHITNEY, EDWARD J., M.D. 1875.*
1869 WHITING, LEWIS, M.D. 1877.*
1868 WHITING, SAMUEL C., M.D. 1884.*
1888 WHITING, WALTER B., M.D., Malden, Mass. Phil. Univ., 1872.
1888 WHITMARSH, HENRY A., M.D., Providence, R. I. N. Y. Hom., 1879.
1869 WHITTAKER, E. B., M.D. 1877.*
1870 WHITTINGTON, JAMES J., M.D. 1876.*
1867 WHITTLE, JAMES PETERSON, M.D. 1881.*
1847 WHITTLE, JOSHUA F., M.D., Nashua, N. H. Vermont Univ., 1843.
1869 WHITTIER, DANIEL BRAINARD, M.D., Fitchburg, Mass. N. Y. Hom., 1863.
1867 WILBUR, C. A., M.D., resigned 1874.
1883 WILCOX, HEWITT, M.D., Buffalo, N. Y. Clev. Hom., 1880.
1885 WILCOX, MRS. HANNAH TYLER, M.D., St. Louis, Mo. Hom., Mo., 1884.
1886 WILCOX, SIDNEY FREEMAN, M.D., New York. N. Y. Hom, 1880.
1881 WILBERTON LAWRENCE G., M.D., Winona, Minn. Hahn., Phil., 1880.
1844 WILD, CHARLES, M.D., died May 30, 1864, æt. 69. Tr. '66, 152.
1859 WILD, EDWARD A., M.D. 1884.*
1867 WILDER, ALEXANDER, M.D. 1868.*

1854 WILDER, DANIEL, M.D. 1874.*
1855 WILDER, LOUIS DEVALVOIS, M.D., New York. Hahn., Phil., 1855.
1876 WILDES, THOMAS, M.D. 1881.*
1886 WILKINS, GEORGE HENRY, M.D., Palmer, Mass. N. Y. Hom., 1883.
1853 WILKINSON, ROSS M., M.D., deceased.
1869 WILLARD, EPHRAIM S., M.D., died April 18, 1873, æt. 53. Tr. '73, 575.
1867 WILLARD, L. HENRY, M.D., Allegheny, Pa. Hahn., Phila., 1866.
1876 WILLIAMS, ADALINE, M.D., Worcester, Mass. N. Y. Women's, 1865.
1844 WILLIAMS, C. D., M.D., died 1882.
1880 WILLIAMS, DAVID R., M.D., Woodhull, Wis. Clev. Hom., 1863.
1852 WILLIAMS, GEORGE CUSHMAN, M.D., died March 10, 1870, æt. 53.
1876 WILLIAMS, NANCY TIFFANY, M.D., Augusta, Me. N. Y. Women's, 1866.
1871 WILLIAMS, THOMAS C., M.D., Philadelphia, Pa. Hahn., Phil., 1853.
1846 WILLIAMS, T. S., M.D. 1867.*
1873 WILLIAMS, WILLIAM K., M D. 1873.*
1876 WILLIAMSON, ALONZO POTTER, M.D., Middletown, N. Y. Hahn., Phil., 1876.
1872 WILLIAMSON, MATTHEW S., M.D., Philadelphia, Pa. Hahn., Phil., 1872.
1844 WILLIAMSON, WALTER, M.D., died December 19, 1870, æt. 60. Tr. '71, 117.
1857 WILLIAMSON, WALTER MARTIN, M.D., died May 5, 1874, æt. 38. Tr. '74, 655.
1869 WILLIS, L. MURRAY, M.D. 1877.*
1846 WILSEY, FERDINAND LITTLE, M D., died May 11, 1860, æt. 63. Tr. '67, 159; '70, 658.
1844 WILSON, ABRAHAM D., M.D., died January 20, 1864, æt. 63. Tr. '67, 159; '70, 659.
1887 WILSON, C. A., M.D., Allegheny, Pa. Clev. Hom., 1883.
1859 WILSON, GROVE HERRICK, M.D., West Meriden, Conn. Berkshire Med., 1849.
1888 WILSON, HAROLD, M.D., Detroit, Mich. Mich. Univ., 1886.
1876 WILSON, JOSEPH H., M.D., Bellefontaine, Ohio. Clev. Hom., 1872.
1873 WILSON, M. T., M.D., San Francisco, Cal. Hom., Pa., 1869.
1865 WILSON, PUSEY, M.D. 1873.*
1865 WILSON, THOMAS P., M.D., Ann Arbor, Mich. Clev. Hom., 1857.
1875 WILSON, WILLIAM W., M.D. 1881.*
1869 WILTBANK, C. J., M.D. 1874.*
1875 WINANS, JONATHAN EDWARDS, M.D. 1881.*
1872 WINSLOW, CAROLINE BROWN, M.D. 1881.*
1878 WINSLOW, WILLIAM HENRY, M.D., Pittsburgh, Pa. Jeff., Phil., 1871.
1885 WINTERBURN, GEORGE W., M.D., New York. Eclect., N. Y., 1875.
1846 WITHERILL, EDWIN C., M.D., died October 30, 1865, æt. 44. Tr. '68, 286.
1846 WITHEY, SAMUEL J., M.D., deceased. Tr. '57, 159.
1886 WOLCOTT, EDWIN H., M.D., Rochester, N. Y. N. Y. Hom., 1881.
1848 WOLCOTT, WILLIAM G., M.D., died Sept. 7, 1886, æt. 50. Tr. '68, 287.
1867 WOOD, HENRY C., M.D. 1873.*
1854 WOOD, JAMES BAYARD, M.D., Westchester, Pa. Hahn., Phil., 1854.
1886 WOOD, JAMES CRAVEN, M.D., Ann Arbor, Mich. Mich. Univ., 1879.
1854 WOOD, JOHN GAGE, M.D., died April 29, 1859, æt. 29. Tr. '59, 166.
1883 WOOD, N. B., Cleveland, Ohio. Honorary Associate.
1860 WOOD, ORLANDO SCOTT, M.D., Omaha, Neb. Hahn., Phil., 1860.
1859 WOODBURY, JOHN HARVEY, M.D., died Feb. 28, 1880, æt. 48. Tr. '81, 131.

1870 WOODBURY, WILLIAM H., M.D., Chicago, Ill., elected 1869.
1865 WOODHOUSE, CHARLES, M.D. 1876.*
1857 WOODRUFF, FRANCIS, M.D., died April 13, 1886, æt. 65. Tr. '86, 137.
1868 WOODS, JARVIS C., M.D., resigned 1886.
1873 WOODS, MARY A. B., M.D., Erie, Pa. Clev. Hom., 1864.
1875 WOODS, STEPHEN, M.D. 1875.*
1868 WOODVINE, DENTON GEORGE, M.D., Boston, Mass. Penn. Univ., 1866.
1870 WOODWARD, ALFRED W., M.D., Chicago, Ill. Hahn., Chic., 1865.
1869 WOODWARD, ALVIN M., M.D., New York. N. Y. Hom, 1862.
1881 WOODWARD, LEWIS, M.D., died June 5, 1883. Tr. '83, 161.
1873 WOODYATT, WILLIAM H., M.D., died January 31, 1880, æt. 34. Tr. '80, 157.
1847 WOOLVERTON, A. N., M.D. 1867 *
1869 WORCESTER, EDWARD, M.D. 1874.*
1888 WORCESTER, GEORGE W., M.D, Newburyport, Mass. Hahn., Chicago, 1883.
1872 WORCESTER, SAMUEL, M.D., Salem, Mass. Harvard, 1868.
1870 WORCESTER, SAMUEL HOWARD, M.D., resigned 1879.
1854 WORK, JOHN A., M.D. 1855.*
1870 WORLEY, P. H., M.D. 1877.*
1874 WORTH, SIDNEY, M.D. 1874.*
1870 WORTHINGTON, AMOS F., M.D., Cincinnati, Ohio. Clev. Hom., 1870.
1860 WORTHINGTON, ANTHONY H., M.D.
1858 WRIGHT, ALBERT, M.D., died December, 1874, æt. 70. Tr. '75, 799.
1869 WRIGHT, ANDREW R., M.D., Buffalo, N. Y. Clev. Hom., 1858.
1853 WRIGHT, A. S., M.D. 1873.*
1872 WRIGHT, EMMA SCOTT, M.D., died November 17, 1879, æt. 31.
1874 WRIGHT, H. AMELIA, M.D. 1881.*
1881 WRIGHT, HELEN LA FOREST, M.D., Boston, Mass. Boston Univ., 1881.
1846 WRIGHT, CLARK, M.D., died March, 1863, æt. 64. Tr. '70, 652.
1867 WRIGHT, WILLIAM, M.D., died September 23, 1880, æt. 74.
1881 WRISLEY, JOHN A., M.D., Greenfield, Mass. Hahn., Phil., 1881.
1881 WYMAN, EDMUND L., M.D., Factory Point, Vt. N. Y. Hom., 1875.
1875 YEOMANS, CLARA, M.D. 1881.*
1881 YODER, DANIEL, M.D., Catasaqua, Pa. Penn. Med., 1858.
1858 YOULIN, JOHN JUVENAL, M.D., died October 30, 1881, æt. 61. Tr. '82, 136.
1882 YOUNG, JAMES A., M.D. 1882.*
1886 YOUNGMAN, MAURICE BECKER, M.D., Atlantic City, N.J. N.Y. Hom., 1880.
1881 ZERNS, WILLIAM M., M.D., died 1887, æt. 35. Tr. '88, 234.
1849 ZUMBROOK, ANTHONY, M.D. 1867.*
1867 ZANTZINGER, ALFRED, M.D., died August 16, 1873, æt. 34. Tr. '74, 663.

APPENDIX.

HISTORICAL NOTE WITH CHRONOLOGICAL LIST OF OFFICERS.

In July, 1843, the New York Homœopathic Physicians' Society appointed a committee to issue invitations to the homœopathic physicians of the United States, to meet in general convention in the city of New York, for the purpose of forming a National Homœopathic Medical Society. The time fixed for holding the Convention was April 10th, 1844. The invitation was responded to by a considerable number of the leading homœopathic practitioners of the country, who, according to previous arrangements, convened in the Lyceum of Natural History in New York City, on the 10th day of April, 1844, the eighty-ninth anniversary of the birth of the illustrious Hahnemann.

The Convention was organized by electing Constantine Hering, M.D., Philadelphia, Pa., President; Josiah F. Flagg, M.D., Boston, Mass., and William Channing, M.D., New York City, N. Y., Vice-Presidents; and Henry Dunnell, M.D., Secretary.

The following resolution was then offered, and unanimously adopted, viz:

Resolved, That it is deemed expedient to establish a society, entitled "The American Institute of Homœopathy."

John F. Gray, M.D., was elected General Secretary of the Institute, and S. R. Kirby, M.D., Treasurer.

The Convention, having accomplished the object for which it had assembled, on motion, adjourned *sine die*.

Immediately after the adjournment of the Convention, on the

evening of the 10th day of April, 1844, at the call of John F. Gray, M.D., General Secretary-elect, the First Session of the American Institute of Homœopathy was held. Josiah F. Flagg, M.D., Boston, Mass., was elected President, and A. Gerald Hull, M.D.. New York City, N. Y., Provisional Secretary.

OFFICERS OF THE INSTITUTE.

First Session.

[*Held at New York City, N. Y., April* 10, 1844.]

JOSIAH F. FLAGG, M.D., Boston, Mass., President.
JOHN F. GRAY, M.D., New York City, N. Y., General Secretary.
A. GERALD HULL, M.D., New York City, N. Y., Provisional Secretary.
S. R. KIRBY, M.D., New York City, N. Y., Treasurer.

Second Session.

[*Held at New York City, N. Y., May* 14, 1845.]

JACOB JEANES, M.D., Philadelphia, Pa., President.
EDWARD BAYARD, M.D., New York City. N. Y., General Secretary.
R. A. SNOW, M.D., New York City, N. Y., Provisional Secretary.
S. R. KIRBY, M.D., New York City, N. Y., Treasurer.

Third Session.

[*Held at Philadelphia, Pa., May* 13, 1846.]

S. R KIRBY, M.D., New York City, N. Y., President.
EDWARD BAYARD, M.D., New York City, N. Y., General Secretary.
R. A. SNOW, M.D., New York City, N. Y., Provisional Secretary.
S. R. KIRBY, M.D., New York City, N. Y., Treasurer.

Fourth Session.

[*Held at Boston, Mass., June* 9, 1847.]

F. R. McMANUS, M.D., Baltimore, Md., President.
EDWARD BAYARD, M.D., New York City, N. Y., General Secretary.
R. A. SNOW, M.D., New York City, N. Y., Provisional Secretary.
S. R. KIRBY, M.D., New York City, N. Y., Treasurer.

Fifth Session.

[*Held at New York City, N. Y., June* 14, 1848.]

WALTER WILLIAMSON, M.D., Philadelphia, Pa., President.
EDWARD BAYARD, M.D., New York City, N. Y., General Secretary.
R. A. SNOW, M.D., New York City, N. Y., Provisional Secretary.
S. R. KIRBY, M.D., New York City, N. Y., Treasurer.

SIXTH SESSION.

[*Held at Philadelphia, Pa., June* 13, 1849.]

SAMUEL GREGG, M.D., Boston, Mass., President.
ALVIN E. SMALL, M.D., Philadelphia, Pa., General Secretary.
WILLIAM P. ESREY, M.D., Springfield, Mass., Provisional Secretary.
S. R. KIRBY, M.D., New York City, N. Y., Treasurer.

SEVENTH SESSION.

[*Held at Albany, N. Y., June* 12, 1850.]

EDWARD BAYARD, M.D., New York City, N. Y., President.
ALVIN E. SMALL, M.D., Philadelphia, Pa, General Secretary.
G. W. SWAZEY, M.D., Springfield, Mass., Provisional Secretary.
S. R. KIRBY, M.D., New York City, N. Y., Treasurer.

EIGHTH SESSION.

[*Held at New Haven, Conn., June* 11, 1851.]

WILLIAM E. PAYNE, M.D., Bath, Me., President.
G. W. SWAZEY, M.D., Springfield, Mass., General Secretary.
CHARLES C. FOOTE, M.D., New Haven, Conn., Provisional Secretary.
S. R. KIRBY, M.D., New York City, N. Y., Treasurer.

NINTH SESSION.

[*Held at Baltimore, Md., May* 19, 1852.]

ELIAL T. FOOTE, M.D., New Haven, Conn., President.
WILLIAM A. GARDINER, M.D., Philadelphia, Pa., General Secretary.
S. S. GUY, M.D., Brooklyn, N. Y., Provisional Secretary.
S. R. KIRBY, M.D., New York City, N. Y., Treasurer.

TENTH SESSION.

[*Held at Cleveland, Ohio, June* 8, 1853.]

RICHARD GARDINER, M.D., Philadelphia, Pa., President.
WILLIAM A. GARDINER, M.D., Philadelphia, Pa., General Secretary.
S. S. GUY, M.D., Brooklyn, N. Y., Provisional Secretary.
S. R. KIRBY, M.D., New York City, N. Y., Treasurer.

ELEVENTH SESSION.

[*Held at Albany, N. Y., June* 7, 1854.]

LYMAN CLARY, M.D., Syracuse, N. Y., President.
S. S. GUY, M.D., Brooklyn, N. Y., General Secretary.
J. REDMAN COXE, JR., M.D., Philadelphia, Pa., Provisional Secretary.
A. S. BALL, M.D., New York City, N. Y., Treasurer.

TWELFTH SESSION.

[*Held at Buffalo, N. Y., June* 6, 1855.]

C. H. SKIFF, M.D., New Haven, Conn., President.
J. P. DAKE, M.D., Pittsburgh, Pa., General Secretary.
A. H. BEERS, M.D., Buffalo, N. Y., Provisional Secretary.
S. S. GUY, M.D., Brooklyn, N. Y., Treasurer.

Thirteenth Session.

[*Held at Washington, D.C., June* 4, 1856.]

G. W. SWAZEY, M.D., Springfield, Mass., President.
F. R. McMANUS, M.D., Baltimore, Md., General Secretary.
J. MIDDLETON, M.D., Baltimore, Md., Provisional Secretary.
S. S. GUY, M.D., Brooklyn, N. Y., Treasurer.

Fourteenth Session.

[*Held at Chicago, Ill., June* 3, 1857.]

J. P. DAKE, M.D., Pittsburgh, Pa., President.
D. S. SMITH, M.D., Chicago, Ill., General Secretary.
G. E. SHIPMAN, M.D., Chicago, Ill., Provisional Secretary.
S. S. GUY, M.D., Brooklyn, N. Y., Treasurer.

Fifteenth Session.

[*Held at Brooklyn, N. Y., June* 2, 1858.]

D. S. SMITH, M.D., Chicago, Ill., President.
WILLIAM E. PAYNE, M.D., Bath, Me., General Secretary.
E. T. RICHARDSON, M.D., Brooklyn, N. Y., Provisional Secretary.
S. S. GUY, M.D., Brooklyn, N. Y., Treasurer.

Sixteenth Session.

[*Held at Boston, Mass., June* 1, 1859.]

P. P. WELLS, M.D., Brooklyn, N. Y., President.
HENRY D. PAINE, M.D., Albany, N. Y., General Secretary.
I. T. TALBOT, M.D., Boston, Mass., Provisional Secretary.
C. H. SKIFF, M.D., New Haven, Conn., Treasurer.

Seventeenth Session.

[*Held at Philadelphia, Pa., June* 2, 1860.]

E. C. WITHERELL, M.D., Cincinnati, Ohio, President.
JACOB BEAKLEY, M.D., New York City, N. Y., General Secretary.
HENRY M. SMITH, M.D., New York City, N. Y., Provisional Secretary.
C. D. SKIFF, M.D., Brooklyn, N. Y., Treasurer.

Eighteenth Session.*

[*Held at Cincinnati, Ohio, June* 7, 1865.]

S. S. GUY, M.D., Brooklyn, N. Y., President.
I. T. TALBOT, M.D., Boston, Mass., Vice-President.†
G. D. BEEBE, M.D., Chicago, Ill., General Secretary.
WILLIAM TOD HELMUTH, M.D., St. Louis, Mo., Provisional Secretary.
D. S. SMITH, M.D., Chicago, Ill., Treasurer.

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* No sessions were held during the Rebellion.

† By a change of the By-Laws the office of Vice-President was instituted at this session.

NINETEENTH SESSION.

[*Held at Pittsburgh, Pa., June* 6, 1866.]

J. S. DOUGLAS, M.D., Milwaukee, Wis., President.
S. R. BECKWITH, M.D., Cleveland, Ohio, Vice-President.
I. T. TALBOT, M.D., Boston, Mass., General Secretary.
HENRY B. CLARKE, M.D., New Bedford, Mass., Provisional Secretary.
E. M. KELLOGG, M.D., New York City, N. Y., Treasurer.

TWENTIETH SESSION.

[*Held at New York City, N. Y., June* 4, 1867.]

WILLIAM TOD HELMUTH, M.D., St. Louis, Mo., President.
P. P. WELLS, M.D., Brooklyn, N. Y., Vice-President.
I. T. TALBOT, M.D., Boston, Mass., General Secretary.
HORACE M. PAINE, M.D., Albany, N. Y., Provisional Secretary.
E. M. KELLOGG, M.D., New York City, N. Y., Treasurer.

TWENTY-FIRST SESSION.

[*Held at St. Louis, Mo., June* 2, 1868.]

HENRY D. PAINE, M.D., New York City, N. Y., President.
T. G. COMSTOCK, M.D., St. Louis, Mo., Vice-President.
I. T. TALBOT, M.D., Boston, Mass., General Secretary.
H. L. CHASE, M.D., Cambridge, Mass., Provisional Secretary.
E. M. KELLOGG, M.D., New York City, N. Y., Treasurer.

TWENTY-SECOND SESSION.

[*Held at Boston, Mass., June* 8, 1869.]

REUBEN LUDLAM, M.D., Chicago, Ill., President.
D. H. BECKWITH, M.D., Cleveland, Ohio, Vice-President.
I. T. TALBOT, M.D., Boston, Mass., General Secretary.
TIMOTHY F. ALLEN, M.D., New York City, N. Y., Provisional Secretary.
E. M. KELLOGG, M.D., New York City, N. Y., Treasurer.

TWENTY-THIRD SESSION.

[*Held at Chicago, Ill., June* 7, 1870.]

DAVID THAYER, M.D., Boston, Mass., President.
J. J. YOULIN, M.D., Jersey City, N. J., Vice-President.
REUBEN LUDLAM, M.D., Chicago, Ill., General Secretary.
T. C. DUNCAN, M.D., Chicago, Ill., Provisional Secretary.
E. M. KELLOGG, M.D., New York City, N. Y., Treasurer.

TWENTY-FOURTH SESSION.

[*Held at Philadelphia, Pa., June* 6, 1871.]

D. H. BECKWITH, M.D., Cleveland, Ohio, President.
J. D. TEMPLE, M.D., St. Louis, Mo., Vice-President.
REUBEN LUDLAM, M.D., Chicago, Ill., General Secretary.
T. C. DUNCAN, M.D., Chicago, Ill., Provisional Secretary.
E. M. KELLOGG, M.D., New York City, N. Y., Treasurer.

TWENTY-FIFTH SESSION.

[*Held at Washington, D C., June* 21, 1872.]

I. T. TALBOT, M.D., Boston, Mass., President.
J. J. YOULIN, M.D., Jersey City, N. J., Vice-President.
ROBERT J. McCLATCHEY, M.D., Philadelphia, Pa., General Secretary.
BUSHROD W. JAMES, M.D., Philadelphia, Pa., Provisional Secretary.
E. M. KELLOGG, M.D., New York City, N. Y., Treasurer.

TWENTY-SIXTH SESSION.

[*Held at Cleveland, Ohio, June* 3, 1873.]

ALVIN E. SMALL, M.D., Chicago, Ill., President.
J. C. BURGHER, M.D., Pittsburgh, Pa., Vice-President.
ROBERT J. McCLATCHEY, M.D., Philadelphia, Pa., General Secretary.
BUSHROD W. JAMES, M.D., Philadelphia, Pa., Provisional Secretary.
E. M. KELLOGG, M.D., New York City, N. Y., Treasurer.

TWENTY-SEVENTH SESSION.

[*Held at Niagara Falls, N. Y., June* 9, 1874.]

JOHN J. YOULIN, M.D., Jersey City, N. J., President.
N. SCHNEIDER, M.D., Cleveland, Ohio, Vice-President.
ROBERT J. McCLATCHEY, M.D., Philadelphia, Pa., General Secretary.
BUSHROD W. JAMES, M.D., Philadelphia, Pa., Provisional Secretary.
E. M. KELLOGG, M.D., New York City, N. Y., Treasurer.

TWENTY-EIGHTH SESSION.

[*Held at Put-in-Bay, Ohio, June* 16, 1875.]

WILLIAM H. HOLCOMBE, M.D., New Orleans, La., President.
L. E. OBER, M.D., La Crosse, Wis., Vice-President.
ROBERT J. McCLATCHEY, M.D., Philadelphia, Pa., General Secretary.
BUSHROD W. JAMES, M.D., Philadelphia, Pa., Provisional Secretary.
E. M. KELLOGG, M.D., New York City, N. Y., Treasurer.

TWENTY-NINTH SESSION.

[*Held at Philadelphia, Pa., June* 26, 1876.]

CARROLL DUNHAM, M.D., Irvington-on-Hudson, N. Y., President.
E. C. FRANKLIN, M.D., St. Louis, Mo., Vice-President.
ROBERT J. McCLATCHEY, M.D., Philadelphia, Pa., General Secretary.
T. C. DUNCAN, M.D., Chicago, Ill, Provisional Secretary.
E. M. KELLOGG, M.D., New York City, N. Y., Treasurer.

THIRTIETH SESSION.

[*Held at Lake Chautauqua, N. Y., June* 26, 1877.]

E. C. FRANKLIN, M D., St. Louis, Mo., President.
T. P. WILSON, M.D., Cincinnati, Ohio, Vice-President.
ROBERT J. McCLATCHEY, M.D., Philadelphia, Pa., General Secretary.
JOSEPH C. GUERNSEY, M.D., Philadelphia, Pa., Provisional Secretary.
E. M. KELLOGG, M.D., New York City, N. Y., Treasurer.

THIRTY-FIRST SESSION.

[*Held at Put-in-Bay, Ohio, June* 18, 1878.]

JOHN C. BURGHER, M D., Pittsburgh, Pa., President.
J. C. SANDERS, M.D., Cleveland, Ohio, Vice-President.
ROBERT J. McCLATCHEY, M.D., Philadelphia, Pa., General Secretary.
JOSEPH C. GUERNSEY, M.D., Philadelphia, Pa., Provisional Secretary.
E. M. KELLOGG, M.D., New York City, N. Y., Treasurer.

THIRTY-SECOND SESSION.

[*Held at Lake George, N. Y., June* 17, 1879.]

CONRAD WESSELHŒFT, M.D., Boston, Mass, President.
N. FRANCIS COOKE, M.D., Chicago, Ill., Vice-President.
ROBERT J. McCLATCHEY, M.D., Philadelphia, Pa., General Secretary.
JOSEPH C. GUERNSEY, M.D., Philadelphia, Pa., Provisional Secretary.
E. M. KELLOGG, M.D., New York City, N. Y., Treasurer.

THIRTY-THIRD SESSION.

[*Held at Milwaukee, Wis., June* 15, 1880.]

T. P. WILSON, M.D., Ann Arbor, Mich., President.
GEORGE A. HALL, M.D., Chicago, Ill., Vice-President.
J. C. BURGHER, M.D., Pittsburgh, Pa., General Secretary.
J. H. McCLELLAND, M.D., Pittsburgh, Pa., Provisional Secretary.
E. M. KELLOGG, M.D., New York City, N. Y., Treasurer.

THIRTY-FOURTH SESSION.

[*Held at Brighton Beach, N. Y., June* 14, 1881.]

J. W. DOWLING, M.D, New York City, N. Y., President.
W. L. BREYFOGLE, M.D., Louisville, Ky., Vice President.
J. C. BURGHER, M.D., Pittsburgh, Pa., General Secretary.
J. H. McCLELLAND, M.D., Pittsburgh, Pa., Provisional Secretary.
E. M. KELLOGG, M.D., New York City, N. Y., Treasurer.

THIRTY-FIFTH SESSION.

[*Held at Indianapolis, Ind., June* 13, 1882.]

W. L. BREYFOGLE, M.D., Louisville, Ky., President.
BUSHROD W. JAMES, M.D., Philadelphia, Pa., Vice-President.
J. C. BURGHER, M.D., Pittsburgh, Pa., General Secretary.
JOSEPH C. GUERNSEY, M.D., Philadelphia, Pa., Provisional Secretary.
E. M. KELLOGG, M.D., New York City, N. Y., Treasurer.

THIRTY-SIXTH SESSION.

[*Held at Niagara Falls, N. Y., June* 19, 1883.]

BUSHROD W. JAMES, M.D., Philadelphia, Pa., President.
O. S. RUNNELS, M.D., Indianapolis, Ind., Vice-President.
J. C. BURGHER, M.D., Pittsburgh, Pa, General Secretary.
T. M. STRONG, M.D., Allegheny City, Pa., Provisional Secretary.
E. M. KELLOGG, M.D., New York City, N. Y., Treasurer.

THIRTY-SEVENTH SESSION.

[*Held at Deer Park, Md., June* 17, 1884.]

JOHN C. SANDERS, M.D., Cleveland, O., President.
T. F. ALLEN, M.D., New York City, N. Y., Vice-President.
J. C. BURGHER, M.D., Pittsburgh, Pa., General Secretary.
T. M. STRONG, M.D., Ward's Island, N. Y.. Provisional Secretary.
E. M. KELLOGG, M.D., New York City, N. Y., Treasurer.

THIRTY-EIGHTH SESSION.

[*Held at St. Louis, Mo., June* 2, 1885.]

TIMOTHY F. ALLEN, M.D., New York City, N. Y., President.
A. C. COWPERTHWAITE, M.D., Iowa City, Iowa, Vice-President.
J. C. BURGHER, M.D., Pittsburgh, Pa., General Secretary.
T. M. STRONG, M.D., Ward's Island, N. Y., Provisional Secretary.
E. M. KELLOGG, M.D., New York City, N. Y., Treasurer.

THIRTY-NINTH SESSION.

[*Held at Saratoga Springs, N. Y., June* 28, 1886.]

O. S. RUNNELS, M.D., Indianapolis, Ind., President.
A. I. SAWYER, M.D., Monroe, Mich., Vice-President.
J. C. BURGHER, M.D., Pittsburgh, Pa., General Secretary.
T. M. STRONG, M.D., Ward's Island, N. Y., Provisional Secretary.
E. M. KELLOGG, M.D., New York City, N. Y., Treasurer.

FORTIETH SESSION.

[*Held at Saratoga Springs, N. Y., June* 27, 1887.]

F. H. ORME, M.D., Atlanta, Ga., President.
A. R. WRIGHT, M.D., Buffalo, N. Y., Vice-President.
J. C. BURGHER, M.D., Pittsburgh, Pa., General Secretary.
T. M. STRONG, M.D., Ward's Island, N. Y., Provisional Secretary.
E. M. KELLOGG, M.D., New York City, N. Y., Treasurer.

FORTY-FIRST SESSION.

[*Held at Niagara Falls, N. Y., June* 29, 1888.]

A. C. COWPERTHWAITE, M.D., Iowa City, Ia., President.
N. SCHNEIDER, M.D., Cleveland, O., Vice-President.
PEMBERTON DUDLEY, M.D., Philadelphia, Pa., General Secretary.
T. M. STRONG, M.D., Ward's Island, N. Y., Provisional Secretary.
E. M. KELLOGG, M.D., New York, N. Y., Treasurer.

N. B.—The World's Homœopathic Convention was held in Philadelphia, Pa., June 26th to July 1st, inclusive, 1876, under the auspices of the Institute, in conjunction with its Twenty-ninth Session, the officers of the Institute being constituted the officers of the Convention.

CONSTITUTION AND BY-LAWS.

CONSTITUTION.

(ADOPTED JUNE 10th, 1874.)

Article I.—Name and Object.

THIS Association shall be styled the AMERICAN INSTITUTE OF HOMŒOPATHY, and its object the improvement of homœopathic therapeutics and all other departments of medical science.

Article II.—Members.

This Institute shall be composed of those physicians who are already members, and of such others as may be hereafter chosen in conformity with the By-Laws.

Article III.—Officers.

The officers of the Institute shall be a President, Vice-President, a General Secretary, a Provisional Secretary, and a Treasurer, with such other officers as shall be designated by the By-Laws, to be chosen at such time, in such manner, for such a period, and with such duties as the By-Laws shall ordain.

Article IV.—Seal.

The Institute shall have and use one common seal, with a suitable device and inscription.

Article V.—Amendments.

This Constitution may be altered or amended by a vote of two-thirds of all the members present at the regular annual meeting, provided that notice of such alteration or amendment shall have been given in writing at a previous annual meeting of the Institute.

BY-LAWS.

(ADOPTED JUNE 20th, 1878.)

Article I.—Meetings.

This Institute shall hold at least one session in each year, at such time and place as may be determined upon from time to time.

Article II.—Officers.

SECTION. 1. The officers shall be elected by ballot at each annual session of the Institute, and shall enter upon their respective duties the first day of January following.

SEC. 2. The officers of the Institute, viz.: the President, Vice-President, General Secretary, Provisional Secretary, and Treasurer, shall constitute an Executive Committee, which shall attend to matters of business not otherwise specially provided for, and perform such other duties as may by vote of the Institute devolve upon it.

SEC. 3. The General Secretary shall be paid an annual salary of five hundred dollars.

Article III.—Duties of Officers.

SECTION. 1. The President shall preside at the meetings of the Institute, and perform the duties usually pertaining to his office, together with such others as may by vote of the Institute devolve upon him. He shall sign all certificates of membership. He shall deliver an address at the opening of each session, embodying a résumé of the progress of Homœopathy during the year past, and make such suggestions as he may deem necessary for the Institute to take action on during the session; and he may also consider any subject relating to medical science.

SEC. 2. The Vice-President shall perform the duties of the President in his absence or disability.

SEC. 3. The General Secretary shall keep a record of the proceedings of the meetings, conduct the correspondence of the Institute, issue notices of meetings, notify members of their election, sign certificates of membership, and perform such other duties as the Institute may direct. It shall further be the duty of the Secretary to

send to each homœopathic journal published in the country, within two months after the adjournment of an annual meeting, a list of the officers for the ensuing year and the members of its bureaus, and the titles of the subjects selected by said bureaus.

SEC. 4. The Provisional Secretary shall assist the General Secretary, and in his absence perform his duties.

SEC. 5. The Treasurer shall receive all money belonging to the Institute, and make all disbursements under the recommendation of the Executive Committee. He shall furnish at each annual meeting a written report of the condition of the finances.

Article IV.—Censors.

At each annual session the Institute shall elect, by ballot, a board of five censors (three of whom shall constitute a quorum), who shall receive and examine the credentials of candidates for membership, and report to the Institute for election such as may be found properly qualified. The censors shall enter upon their duties on the first day of January following their election.

Article V.—Membership.

SECTION 1. Candidates for membership shall present to the Board of Censors a certificate of three members of the Institute, that the applicant has pursued a regular course of medical studies, according to the requirements of the existing institutions of this country, and sustains a good moral character and professional standing. Such certificate shall state when and where the applicant obtained a diploma. If found qualified the candidate may be elected a member. No person shall be considered a member, however, before paying an admission fee of two dollars, and the annual dues, which shall entitle him to a certificate of membership.

SEC. 2. Any physician properly accredited as a delegate, shall be admitted during the session of the Institute to all the privileges of members, except voting and eligibility to office, on the following basis:

First. From every association composed of more than fifty members from different States, two delegates, with an additional delegate for every twenty members.

Second. From every State society, two delegates, with an additional delegate for every twenty members.

Third. From every county or local society, one delegate.

Fourth. From every hospital, asylum for the insane, or dispensary, actually established, one delegate.

Fifth. From every medical journal published, one delegate.

Sixth. From every college associated with the Institute, two delegates; said delegates to constitute the Inter-collegiate Committee of the Institute.

Such delegates shall be elected for the term of one year.

SEC. 3. Any foreign physician may be elected a Corresponding Member of the Institute at any annual meeting, and shall have all the privileges of members, except voting and eligibility to office.

SEC. 4. The Institute may, at any annual meeting, elect as Honorary Members, not to exceed five in one year, any foreign physicians who may be judged worthy from their superior attainments in medicine; provided that the names of persons proposed for Honorary Membership shall have been presented at a previous annual meeting. Such Honorary Members shall have all the privileges of members, except voting and eligibility to office.

SEC. 5. All members of the Institute who have maintained twenty-five consecutive years of membership shall be considered *Senior Members*, and be exempt from the payment of annual dues; and the names of such members shall be printed first in the list of members, in capital letters.

SEC. 6. Of State societies represented in the Institute, the Presidents shall be *ex-officio* Vice-Presidents, and the Recording Secretaries shall be *ex-officio* Corresponding Secretaries of the Institute, and these officers shall communicate through the various bureaus any facts or information concerning the condition of these societies, and the progress of medicine and homœopathy in their several States.

SEC. 7. The Institute may, at any annual meeting, elect as Honorary Associate Members, not to exceed three in any one year, any persons not members of the medical profession, who have in any way been of special service to science or humanity, and particularly those who have been special patrons of homœopathy; and said Honorary Associate Members shall have all the privileges of Honorary Members.

Article VI.—Dues.

SECTION 1. Members shall pay annually the sum of five dollars towards defraying the expenses of the Institute. The *Proceedings*

of the Institute will be sent to those members only who have paid their dues.

Article VII.—Bureaus and Committees.

SECTION 1. The following BUREAUS shall be appointed as hereinafter provided for:

a. Materia Medica and General Therapeutics.

b. Clinical Medicine, embracing Diagnosis and General and Special Therapeutics.

c. Obstetrics.

d. Gynæcology.

e. Pædology.

f. Sanitary Science.

g. Surgery.

h. Anatomy, Physiology, and Pathology (including Microscopy and Histology).

i. Psychological Medicine.

j. Ophthalmology, Otology and Laryngology.

k. Organization, Registration and Statistics.

SEC. 2. Each of these bureaus shall consist of not less than five nor more than ten members.

SEC. 3. Each bureau, in its annual report, shall present a résumé of discoveries and progress in its respective field, together with papers upon its special subject selected for inquiry and discussion.

SEC. 4. The following STANDING COMMITTEES shall be appointed, as hereinafter provided for:

a. Legislation.

b. Medical Literature.

c. Foreign Correspondence.

d. Inter-collegiate.

e. Drug Provings.

f. Pharmacy.

g. Medical Education.

SEC. 5. Each of these committees shall consist of at least five members.

SEC. 6. The President shall appoint the chairmen of all bureaus for the ensuing year; and shall announce all such appointments not later than the Thursday morning session.

SEC. 7. The chairman of each bureau, as soon as possible after

appointment, shall call his associates together and organize his bureau by the appointment of a secretary; and, being duly organized, the bureau shall select a special subject upon which to labor and report at the next meeting of the Institute.

SEC. 8. No bureau shall submit for discussion and publication any papers not relating to the special subject agreed upon at the beginning of the year, except such as may be included in the general résumé.

SEC. 9. No report or paper shall be received by the Institute in an incomplete or unfinished condition; and no paper shall be published in the *Transactions* which has been published previous to its presentation to the Institute, or which is not handed to the General Secretary before the close of the session.

SEC. 10. Immediately upon the reception and disposition of the report of a standing committee, the President shall appoint the committee for the following year, with the exception of the Inter-collegiate Committee which is appointed by the several colleges.

SEC. 11. No paper shall be read from any bureau or committee requiring over fifteen minutes, without unanimous consent, but an abstract of the same may be presented.

SEC. 12. The TRANSACTIONS of the Institute shall be issued by the General Secretary within five months after the close of the session, and copies shall be delivered to those entitled to them without individual expense.

SEC. 13. All reports by delegates from various societies and institutions shall be limited to five minutes each.

SEC. 14. In all discussions no speaker shall be allowed more than five minutes, nor to speak more than once upon the same subject, without a vote of consent, taken in the usual manner.

SEC. 15. Members neglecting the payment of dues for three years, after proper notification from the Treasurer, shall have their names dropped from the roll of membership.

SEC. 16. The Executive Committee shall constitute the Committee of Publication.

SEC. 17. The election of officers for the ensuing year, and the determination of the next place for the meeting of the Institute, shall take place at 12 o'clock on the third day of the session.

Article VIII.

All complaints relating to a violation of the Code of Ethics of the Institute shall be referred to the Senate of Seniors for consideration and adjustment, and its decisions shall be final without further action of the Institute.

Article IX.—Amendments.

These By-Laws may be altered or amended by a vote of two-thirds of the members present at the annual meeting.

STANDING RESOLUTIONS.

Resolved, That the pharmaceutists of the homœopathic school be recommended to use, in the preparation of drugs by trituration, the proportions of ten grains of the drug to ninety grains of Sugar of Milk; and, for the sake of uniformity, to retain the numerical designation adopted by Hahnemann, and continued by the majority of homœopathic physicians.—*Adopted June 8th*, 1854.

Resolved, That it is the duty of the American Institute of Homœopathy to extend a fostering care to the homœopathic medical colleges of the United States, and exert its influence in directing students of medicine, who are seeking admission to the honors of the profession, to their halls for instruction.

Resolved, That the American Institute of Homœopathy does not necessarily indorse the doctrines contained in the reports of committees by accepting and publishing such reports with the *Proceedings*. —*Adopted June 4th*, 1857.

Resolved, That in the organization of life insurance companies which discriminate in favor of practical homœopathists, we recognize an important instrumentality, which by showing the superiority of homœopathic treatment, will contribute to the more rapid adoption of the principles of medical science promulgated by the illustrious Hahnemann; and that, whenever practicable, the members of this Institute will give to such organization a united and cordial support.—*Adopted June 7th*, 1867.

Resolved, That the Bureau of Clinical Medicine be requested to give attention to the collection of clinical verifications of the symptoms contained in our "Materia Medica," and to include such verifications in its reports, with whatever details it deems proper, giving credit to the authors.

Resolved, That the Institute invite State societies to co-operate in this work of clinical verification of the "Materia Medica."—*Adopted June 9th*, 1869.

Resolved, That each member of the American Institute will best subserve the interest of homœopathic medicine by using great care to avoid accepting any student of medicine into his office who does not or cannot give evidence of possessing the preliminary education recommended in the report of the Committee on Education.

Resolved, That the resolution relating to qualification apply to all students whose terms of pupilage shall commence subsequent to the year 1870, and that every effort be made to acquaint the profession at large with the action of the Institute.—*Adopted June 8th*, 1870.

Resolved, That hereafter all provings by a single prover, presented through the Bureau of Materia Medica, Pharmacy and Provings, be referred back to the bureau, to be retained by it until a sufficient number of provings are obtained to warrant the bureau in collating the same and presenting them to the Institute for publication; and such collation and presentation shall be a part of the duty of that bureau.—*Adopted June 9th*, 1874.

Resolved, That *Sectional Meetings* of any bureau may be held at the call of the chairman of that bureau, provided such meetings are not held during the sittings of the Institute; nor during the meetings of the other Sections except as provided in the adopted order of business.

WHEREAS, It is now a difficult matter to obtain mortuary reports from many of our cities and towns; therefore—

Resolved, That this body would recommend to the members of the Institute, that they, in their respective cities and towns, where published reports are to be had, obtain and furnish annually to the Bureau of Sanitary Science, a copy of such published reports; and further, that when such reports are made, State statistical mortuary reports be likewise sent to this bureau.

Resolved, That in States, cities and towns where these reports are not made and published, they be urged to publish them for the general good of the country, as well as for local advantages.—*Adopted June 15th*, 1875.

Resolved, That all papers rejected by the Committee of Publication, and not published with the TRANSACTIONS of the Institute, be referred back to their authors by the General Secretary, to be disposed of as they may see fit.—*Adopted June 27th*, 1877.

Resolved, That the Committee of Arrangements, in preparing the order of business for future meetings of the Institute, be requested to set apart a certain time for hearing reports from delegates from institutions and societies who may be present at the meeting; such reports to be limited to five minutes each.—*Adopted June 29th*, 1877.

Resolved, That the General Secretary shall hereafter furnish to the homœopathic journals editorial copies of the TRANSACTIONS of this Institute.—*Adopted June 26th*, 1879.

Resolved, That the report of the Bureau of Organization, Registration and Statistics follow that of the Necrologist.

Resolved, That the selection of the time and place of meeting and the election of officers take place at noon of the third day of the session.—*Adopted June 15th*, 1880.

Resolved, That it shall be the duty of the General Secretary to send an official copy of the stenographer's report of all discussions on the subjects submitted by the several bureaus to the authors of the same respectively, for correction, and that such copies shall be returned to the Secretary within one week of the time of their reception.—*Adopted June 15th*, 1882.

Resolved, That it shall be the especial duty of the Provisional Secretary to make stenographic reports of all debates, keep the records of general business, and furnish the same to the General Secretary for publication; and that the compensation for such service shall be adjusted by the President, Vice-President and Treasurer, acting for the Executive Committee.—*Adopted June 21st*, 1883.

Resolved, That the names and residences of all applicants for membership be announced by the chairman of the Board of Censors, in open session, at least *six hours* before their election is voted upon. —*Adopted June 2d*, 1885.

Resolved, That all papers presented in each section, together with the discussion thereon, shall be referred to the Committee of Publication.—*Adopted June 27th*, 1887.

Resolved, That in case of vacancy occurring in any bureau or committee, after the announcement of the same by the President, the

chairman shall have the power to fill the same, giving prompt notice thereof to the General Secretary of the Institute, who shall include such names in subsequent publications.—*Adopted June 29th*, 1887.

Resolved, That this Institute condemns the action of any college which graduates an unsuccessful candidate from another college, unless he attends at least one full course of lectures at the college where he applies for a degree.—*Adopted June 30th*, 1887.

Resolved, That no member shall serve on more than one bureau during any one year.—*Adopted June 30th*, 1887.

Resolved, That hereafter papers in general session shall not consume more than fifteen minutes in the reading; and that not more than half the time allotted to bureaus in sectional meeting shall be occupied in the reading of papers—papers whose authors are present being given precedence in reading.—*Adopted July 1st*, 1887.

Resolved, That no report or paper shall be rejected by the Committee of Publication except with the concurrence of a majority of said committee.—*Adopted June 26th*, 1888.

Resolved, That in making up the lists of existing journals, and institutions in any way illustrative of homœopathy, by the Bureau of Organization, Registration and Statistics, and the Committee on Medical Literature, all such shall be embraced as recognize the homœopathic principle; that no journal or institution thus listed shall be stricken off without a distinct statement, through the General Secretary to the Senate of Seniors, of the charges brought against it, and then not without due notice and opportunity for defence on the part of the journal or institution under censure, final action on the case being deferred until the succeeding annual meeting. But the name of any journal or institution may be dropped from the list without ceremony after having failed to make report to the Institute for three consecutive years.—*Adopted June 28th*, 1888.

Resolved, That the American Institute of Homœopathy heartily endorses the report and action of the Inter-collegiate Committee in requiring from all graduates from medical colleges after the session of 1890–91 at least three years of medical study, including three

full courses of didactic and clinical instruction of at least six months each.

Resolved, That this Institute will, after 1891, require from all applicants for membership graduating after that time a full compliance with the above requirement for graduation.

Resolved, That from and after the year 1891 the American Institute of Homœopathy will not recognize the diplomas of any college requiring less than three years of study and attendance upon three annual courses of lectures of at least six months each.—*Adopted June 28th*, 1888.

Resolved, 1. That the graduates of each class in our colleges be asked to form Provers' Clubs, under the direction of the Directors of Provings, thus forming a link between the colleges and this Institute, and thus increasing the interest upon this subject on the part of graduates and alumni.

2. That the chairman of the Committee of Pharmacy and Provings, and of the Bureaus of Materia Medica and Clinical Medicine, together with the retiring President of each year, be constituted a permanent Committee of Conference to formulate a scheme and mode for perfecting this work.

3. That homœopathic journals be requested to collect and publish all verifications of the provings of the remedies chosen each year for study.—*Adopted June 28th*, 1888.

Resolved, That the Committee on Medical Legislation shall hereafter consist of five members, the term of service of one member expiring each year.—*Adopted June 29th*, 1888.

Resolved, That a committee of five members, including the General Secretary and the chairman of the Committee of Local Arrangements, shall be appointed to arrange the programme and expedite the business of the session.—*Adopted June 29th*, 1888.

Resolved, That the time allotted to any standing committee for the presentation of its report shall not exceed fifteen minutes.—*Adopted June 29th*, 1888.

Resolved, That no member of a bureau who has failed to perform active service thereon shall be appointed to its chairmanship for the ensuing year.—*Adopted June 29th*, 1888.

SENIOR MEMBERS.

The figures placed above the names show the date of membership. Members are requested to inform the General Secretary of any change in their addresses.

☞ Members residing in a city are requested to furnish the General Secretary with their *street* addresses.

Article V, Section 5, of the By Laws.

All members of the Institute who have maintained twenty-five consecutive years of membership shall be considered *Senior Members*, and be exempt from the payment of annual dues; and the names of such members shall be printed first in the list of members, in capital letters.

1844.

BALL, ALONZO S., M.D., 56 W. Fifty-third Street, New York.
DUBS, SAMUEL R., M.D., Doylestown, Pa.
NEIDHARD, CHARLES, M.D., 1511 Arch Street, Philadelphia, Pa.
PAINE, HENRY D., M.D., 19 W. 24th Street, New York, N. Y.
ROBINSON, HORATIO, M.D., Auburn, N. Y.
WARD, ISAAC M., M.D., Newark, N. J.
WELLS, P. P., M.D., 158 Clinton Street, Brooklyn, N. Y.

1845.

BOARDMAN, J. C., M.D., Trenton, N. J.
MCVICKAR, J. A., M.D., 100 E. Seventeenth Street, New York.

1846.

BAYARD, EDWARD, M.D., 8 W. Fortieth Street, New York.
BELCHER, GEORGE E., M.D., 522 Madison Avenue, New York.
BERENS, BERNHARD, M.D., 1507 Arch Street, Philadelphia, Pa.
BERENS, JOSEPH, M.D., cor. Broad and Green Sts., Phila., Pa.
EHRMAN, F., M.D., 46 W. Seventh Street, Cincinnati, Ohio.

HALLOCK, LEWIS, M.D., 34 E. Thirty-ninth Street, New York.
JONES, E. DARWIN, M.D., Albany, N. Y.
RHEES, MORGAN J., M.D., Wheeling, W. Va.

1847.

CHASE, HIRAM L., M.D., 752 Main Street, Cambridge, Mass.
GUY, SAMUEL S., M.D., 814 Sutter St., San Francisco, Cal.
SHACKFORD, RUFUS, M.D., Portland, Me.
THAYER, DAVID, M.D., 200 Columbus Avenue, Boston, Mass.
*WHITTLE, JOSHUA F., M.D., Nashua, N. H.

1848.

DONOVAN, THOMAS W., M.D., New Brighton, Staten Island, N. Y.
GUERNSEY, EGBERT, M.D., 526 Fifth Avenue, New York.
MARCY, ERASTUS E., M.D., 353 Fifth Avenue, New York.
PALMER, MILES W., M.D., 235 E. Eighteenth Street, New York.
RAYMOND, JONAS C., M.D., 626 Thirteenth Street, Oakland, Cal.
SMITH, D. S., M.D., 1255 Michigan Avenue, Chicago, Ill.
WELLS, LUCIEN B., M.D., 225 Genesee Street, Utica, N. Y.

1849.

GARDINER, DANIEL R., M.D., Woodbury, N. J.
RODMAN, WILLIAM W., M.D., New Haven, Conn.

1850.

FOOTE, GEORGE F., M.D., Marlborough, N. Y.
PAINE, HORACE M., M.D., 105 State Street, Albany, N. Y.
SPRINGSTEED, DAVID, M.D., 145 W. Fifty-eighth Street, N. Y.

1851.

BELL, WILLIAM C., M.D., Middletown, Conn.
MARTIN, JOSEPH L., M.D., Baltimore, Md.

1852.

DAKE, JABEZ P., M.D., 29 N. Vine Street, Nashville, Tenn.
HAMMOND, MILTON, M.D., 310 N. Paca Street, Baltimore, Md.

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* Deceased since the Session of 1888.

1853.

ANGELL, HENRY C., M.D., 16 Beacon Street, Boston, Mass.
BARNES, GEORGE WILLIAM, M.D., San Diego, Cal.
BISSELL, ARTHUR F., M.D., 157 Maiden Lane, New York.
HELMUTH, WM. TOD, M.D., 299 Madison Avenue, New York.
PAINE, JOSEPH P., M.D., Hotel Eliot, Roxbury, Mass.
PARKS, JOHN M., M.D., Hamilton, Ohio.
SKILES, F. W., M.D., 160 Remsen Street, Brooklyn, N. Y.
TALBOT, I. T., M.D., 66 Marlborough Street, Boston, Mass.

1854.

BURGHER, J. C., M.D., 960 Penn Avenue, Pittsburgh, Pa.
COX, JAMES W., M.D., 109 State Street, Albany, N. Y.
HOFMANN, H. H., M.D., 808 Penn Avenue, Pittsburgh, Pa.
JONES, ELIJAH U., M.D., Taunton, Mass.
POMEROY, THOMAS F., M.D. [Residence unknown.]
SISSON, EDWARD R., M.D., New Bedford, Mass.
WATSON, WM. H., M.D., 270 Genesee Street, Utica, N. Y.
WOOD, J. B., M.D., West Chester, Pa.

1855.

FINCKE, BERNHARDT, M.D., 122 Livingston St., Brooklyn, N. Y.
WILDER, LOUIS DE V., M.D., 55 W. Thirty-third Street, N. Y.

1857.

BALDWIN, JARED G., M.D., 8 E. Forty-first Street, New York.
BECKWITH, SETH R., M.D. [Residence unknown.]
HATCH, PHILO L., M.D., Minneapolis, Minn.
LUDLAM, REUBEN, M.D., 1823 Michigan Avenue, Chicago, Ill.

1858.

CAMPBELL, MELANCTHON W., M.D., Troy, N. Y.
DETWILER, J. J., M.D., Easton, Pa.
FRELIGH, MARTIN, M.D., 31 W. Twenty-fourth Street, New York.
FULLGRAFF, OTTO, M.D., 6 Lexington Ave., New York.
HAWLEY, L. B., M.D., Phœnixville, Pa.
JONES, JOSEPH E., M.D., West Chester, Pa.
KELLOGG, EDWIN M., M.D., 134 E. Thirty-sixth St., New York.
LOUGEE, WILLIAM H., M.D., Lawrence, Mass.

MINTON, HENRY, M.D., 165 Joralemon Street, Brooklyn, N. Y.
PERRINE, W. L. R., M.D., 137 Montague St., Brooklyn, N. Y.
VERDI, TULLIO S., M.D., 815 14th St., N.W., Washington, D. C.
WEST, EDWIN, M.D., 111 W. Washington Place, New York.

1859.

CHAMBERLAIN, W. B., M.D., Worcester, Mass.
CULLIS, CHARLES, M.D., 16 Somerset Street, Boston, Mass.
FARNSWORTH, C. H., M.D., East Cambridge, Mass.
HOBSON, J. V., M.D., Richmond, Va.
HOUGHTON, H. A., M.D., 12 Cordis Street, Boston, Mass.
JAMES, BUSHROD W., M.D., N.E. cor. 18th and Green, Phila., Pa.
JEFFERDS, G. P., M.D., Bangor, Maine.
MATTHES, G. F., M.D., New Bedford, Mass.
ORME, F. H., M.D., 18 N. Broad Street, Atlanta, Ga.
PRATT, L. M., M.D., 104 State Street, Albany, N. Y.
SANDERS, O. S., M.D., 511 Columbus Avenue, Boston, Mass.
SHERMAN, J. H., M.D., 534 Broadway, Boston, Mass.
SPARHAWK, G. E. E., M.D., Burlington, Vt.
WESSELHŒFT, C., M.D., 302 Columbus Ave., Boston, Mass.
WESSELHŒFT, W. P., M.D., 176 Commonwealth Ave., Boston, Mass.
WILD, E. A., M.D. [Residence unknown.]
WILSON, G. H., M.D., Meriden, Conn.

1860.

BRADFORD, F. STANDISH, M.D., Morristown, N. J.
HALL, GEORGE A., M.D., 2400 Prairie Avenue, Chicago, Ill.
HOLCOMBE, WM. H., M.D., 288 St. Charles St., New Orleans, La.
JOHNSON, ISAAC C., M.D., Kennet Square, Pa.
MALIN, JOHN, M.D., 70 W. Chelten Avenue, Germantown, Philadelphia, Pa.
PAYNE, JAS. H., M.D., 342 Commonwealth Ave., Boston, Mass.
READING, EDWARD, M.D., Hatborough, Pa.
SANDERS, JOHN C., M.D., 308 Prospect Street, Cleveland, Ohio.
SMITH, HENRY M., M.D., 61 Fifth Avenue, cor. Thirteenth Street, New York.
SMITH, T. FRANKLIN, M.D., 264 Lenox Avenue, New York.
WHITE, THEODORE C., M.D., 21 S. Clinton St., Rochester, N. Y.
WOOD, O. S., M.D., Omaha, Neb.

MEMBERS.

The figures placed before the names indicate the date of membership.

☞ Members residing in a city are requested to furnish the General Secretary with their *street* addresses.

☞ Members are requested to inform the General Secretary of any change in their addresses.

Article VII, Section 15, *of the By-Laws.*

Members neglecting the payment of dues for three years, after proper notification from the Treasurer, shall have their names dropped from the roll of membership.

1883. Abbott, Clarence G., M.D., Woodbury, N. J.
1870. Abell, D. T., M.D., Sedalia, Mo.
1886. Adams, C. B., M.D., New Haven, Conn.
1887. Adams, George Smith, M.D., Westborough, Mass.
1876. Adams, Reuben A., M.D., 46 North Fitzhugh Street, Rochester, N. Y.
1867. Albertson, J. A., M.D., 111 Powell Street, San Francisco, Cal.
1881. Allen, Albion H., M.D., New London, Conn.
1880. Allen, Charles, M.D., 415 Seventh Street, S. W., Washington, D. C.
1873. Allen, George D., M.D., Portland, Mich.
1881. Allen, George E., M.D., Youngstown, Ohio.
1872. Allen, Henry C., M.D., Ann Arbor, Mich.
1887. Allen, Lamson, M.D., Southbridge, Mass.
1871. Allen, Richard C., M.D., 4519 Frankford Avenue, Philadelphia, Pa.
1866. Allen, Timothy F., M.D., 10 E. 36th Street, New York.

1868. Alvord, Samuel, M.D., Chicopee Falls, Mass.
1869. Arcularius, Philip E., M.D., 57 E. 21st Street, New York.
1882. Arndt, Hugo R., M.D., Ann Arbor, Mich.

1885. Babcock, D. A., M.D., Fall River, Mass.
1871. Bacon, Chas. A., M.D., 1312 Connecticut Avenue, Washington, D. C.
*1867. Baer, O. P., M.D., Richmond, Ind.
1874. Baethig, Henry, M.D., 350 Pennsylvania St., Buffalo, N. Y.
1870. Bagley, H. B., M.D., Seattle, Washington Territory.
1888. Bailey, Benjamin F., M.D., Lincoln, Neb.
1887. Baily, Alfred W., M.D., Atlantic City, N. J.
1881. Baker, Almena J., M.D., 168 W. Newton St., Boston, Mass.
1886. Baker, Harry C., M.D., Kansas City, Mo.
1875. Baker, Milton H., M.D., Highland Park, Ill.
1870. Baker, R. F., M.D., Davenport, Iowa.
1871. Baldwin, Aaron, M.D., 219 E. Capitol St., Washington, D.C.
1888. Baldwin, Orpha D., M.D., 170 Prospect St., Cleveland, O.
1883. Ballard, Laura A., M.D., 205 Powell St., San Francisco, Cal.
1868. Bancroft, Walton, M.D., Keokuk, Iowa.
1888. Barber, Oscar M., M.D., Mystic, Conn.
1888. Barden, John M., M.D., Mansfield, Pa.
1881. Barker, Clarence F., M.D., Manistee, Mich.
1867. Barker, William C., M.D., Waukegan, Ill.
1881. Barnett, Amelia, M.D., 261 W. 23d Street, New York.
1886. Barnsdell, J. W., M.D., 1607 Howard St., Omaha, Neb.
1868. Barrows, George S., M.D., Marion, Kan.
1886. Bartlett, Clarence, M.D., 1506 Girard Ave., Philada., Pa.
1873. Bartlett, Henry H., M.D., Leslie, Mich.
1880. Bassett, John S., M.D., 11 W. Thirty-first St., New York.
1887. Bayless, Herman G., M.D., Knoxville, Tenn.
1867. Baylies, B. L. B., M.D., 418 Putnam Ave., Brooklyn, N. Y.
1887. Baynum, Mary H., M.D., Murdock's Hospital, Huntingdon Avenue, Boston, Mass.
1878. Becker, Fred. W., M.D., 161 E. 3d Street, Cincinnati, Ohio.
1865. Beckwith, D. H., M.D., 528 Prospect St., Cleveland, Ohio.
1886. Bedell, Leila G., M.D., 181 Dearborn Ave., Chicago, Ill.

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* Deceased since the Session of 1888.

1877. Beebe, Clarence E., M.D., 21 W. 37th Street, New York.
1870. Beebe, E. W., M.D., 173 Wisconsin St., Milwaukee, Wis.
1876. Beebe, Henry E., M.D., Sidney, Ohio.
1868. Bell, Jas. B., M.D., 178 Commonwealth Ave., Boston, Mass.
1867. Bell, James S., M.D., Canton, Dakota.
1877. Bellows, Howard P., M.D., 118 Boylston St., Boston, Mass.
1872. Bender, Prosper, M.D., 128 Boylston St., Boston, Mass.
1888. Bennett, Francis M., M.D., Chicopee, Mass.
1869. Bennett, Hollis K., M.D., 256 Main St., Fitchburg, Mass.
1881. Bennett, James A., M.D., 4 Irving Place, New York.
1881. Bennett, N. K., M.D., 142 Wilson Street, Brooklyn, N. Y.
1872. Berghaus, Alex., M.D., 138 E. Sixty-fifth St., New York.
1870. Betts, B. Frank, M.D., 1609 Girard Ave., Philadelphia, Pa.
1874. Biegler, Jos. A., M.D., 58 S. Clinton St., Rochester, N. Y.
1887. Bier, Peter A., M.D., 4200 Butler St., Pittsburgh, Pa.
1868. Biggar, H. F., M.D., 154 Public Square, Cleveland, Ohio.
1876. Bigler, Wm. H., M.D., 118 N. Twelfth Street, Philada., Pa.
1871. Bingaman, C. F., M.D., 922 Penn Ave., Pittsburgh, Pa.
1881. Bingham, Helen M., M.D., 1949 Grand Avenue, Denver, Col.
1887. Birdsall Asahel H., M.D., Brooklyn, N. Y.
1881. Birdsall, Stephen T., M.D., Glens Falls, N. Y.
1869. Bishop, Herbert M., M.D., Norwich, Conn.
1883. Bishop, Frank A., M.D., Hannibal, Mo.
1887. Blodgett, S. H., M.D., 880 Main Street, Cambridge, Mass.
1869. Bloss, J. P., M.D., Troy, N.Y.
1865. Boericke, F. E., M.D., 921 Arch St., Philadelphia, Pa.
1883. Boericke, Wm., M.D., 834 Sutton St., San Francisco, Cal.
1874. Bond, Mary E., M.D., 122 Lexington Ave., New York.
1880. Boothby, Alonzo, M.D., 260 Clarendon St., Boston, Mass.
1869. Bowen, G. W., M.D., Fort Wayne, Ind.
1871. Bowie, Alonzo P., M.D., Uniontown, Pa.
1869. Bowman, Benjamin, M.D., Chambersburg, Pa.
1888. Boyd, Philander S., M.D., 610 Monroe St., Nashville, Tenn.
1870. Boyer, Francis W., M.D., Pottsville, Pa.
1874. Boynton, Frank H., M.D., 34 W. 32d St., New York.
1865. Bradford, T. C., M.D., 315 Race Street, Cincinnati, Ohio.
1882. Bradley, Benjamin A., M.D., 100 Auburn Avenue, Cincinnati, Ohio.
1883. Bradner, Ira S., M.D., Middletown, N. Y.

1877. Branstrup, William T., M.D., Topeka, Kan.
1869. Breyfogle, Charles W., M.D., San Jose, Cal.
1873. BREYFOGLE, W. L., M.D., New Albany, Ind.
1882. Brigham, Reeder S., M.D., New Albany, Ind.
1883. Briggs, Elmer E., M.D., Washington Avenue, 31st ward, Pittsburgh, Pa.
1869. Briry, Milton S., M.D., Bath, Maine.
1887. Britton, Edgar B., M.D., Baltimore, Md.
1876. Brown, Asa W., M.D., Providence, R. I.
1867. Brown, Edward V., North Tarrytown, N. Y.
1885. Brown, Henry A., M.D., Reading, Mass.
1872. Brown, Samuel, M.D., 651 N. Tenth St., Philadelphia, Pa.
1867. Bryant, Melville, M.D., 54 Green Ave., Brooklyn, N. Y.
1869. Buck, J. D., M.D., 136 W. Eighth St., Cincinnati, O.
1885. Buddeke, Ivo W., M.D., Memphis, Tenn.
1868. Budlong, John C., M.D., Providence, R. I.
1873. Buffum, J. H., M.D., 100 State Street, Chicago, Ill.
1887. Bullard, J. Arthur, Wilkesbarre, Pa.
1867. Burdick, Stephen P., M.D., 1409 Grove St., Oakland, Cal.
1886. Burritt, Alice, M.D., 1068 Broadway, Oakland, Cal.
1883. Burroughs, Amelia, M.D., 1617 Dodge St., Omaha, Neb.
1875. Butler, Clarence W., M.D., Montclair, N. J.
1873. Butler, W. M., M.D., 507 Clinton Ave., Brooklyn, N.Y.

1881. Campbell, Alice B., M.D., 114 S. 3d St., Brooklyn, N. Y.
1876. Campbell, James A., M.D., 1729 Washington Avenue, St. Louis, Mo.
1886. Candee, J. Willis, M.D., Syracuse, N. Y.
1873. Canfield, Corresta T., M.D., 244 Lincoln Ave., Chicago, Ill.
1883. Carmichael, John H., M.D., 41 Maple St., Springfield, Mass.
1882. Carvill, Alphonso H., M.D., Somerville, Mass.
1881. Case, Erastus E., M.D., 109 Ann Street, Hartford, Conn.
1879. Casseday, F. F., M.D., 546 Main St., Kansas City, Mo.
1875. Chapman, Millie J., M.D., 916 Penn Ave., Pittsburgh, Pa.
1871. Chase, Maurice J., M.D., Galesburg, Ill.
1876. Chase, Herbert A., M.D., 772 Main Street, Cambridgeport, Mass.
1870. Cheney, Benj. H., M.D., 189 Church St., New Haven, Conn.
1865. Childs, W. R., M.D., 934 Penn Avenue, Pittsburgh, Pa.

1871. Church, Charles A., M.D., Passaic, N. J.
1882. Church, T. T., M.D., 120 Main Street, Salem, Ohio.
1881. Clapp, James W., M.D., Brookline, Mass.
1886. Clark, Byron G., M.D., 134 W. 126th Street, New York.
1888. Clark, Frank M., M.D., Salem, Ohio.
1887. Clark, Lyman A., M.D., Cambridge, N. Y.
1888. Clarke, Henry L., M.D., New Bedford, Mass.
1887. Claypool, Albert, M.D., Toledo, Ohio.
1883. Cleveland, Chas. L., M.D., 112 Euclid Ave., Cleveland, O.
1888. Closson, James H., M.D., Philadelphia, Pa.
1869. Coburn, Edward S., M.D., 91 Fourth Street, Troy, N. Y.
1866. Cogswell, C. H., M.D., 65 Second Ave., Cedar Rapids, Iowa.
1886. Colby, Edwin A., M.D., Gardner, Mass.
1883. Cole, Directus De Forest, M.D., Morrisville, N. Y.
1883. Cole, Ezra Z., M.D., Michigan City, Ind.
1874. Colton, Henry E., M.D., 362 Pearl Street, Buffalo, N. Y.
1869. Compton, J. Augustine, M.D., Indianapolis, Ind.
1866. Comstock, T. G., M.D., 507 N. 14th Street, St. Louis, Mo.
1876. Conant, Thomas, M.D., Gloucester, Mass.
1881. Cook, Joseph T., M.D., 138 Delaware Ave., Buffalo, N. Y.
1886. Cooke, Persifor Marsden, M.D., Bethlehem, Pa.
1874. Coon, Henry C., M.D., Alfred Centre, N. Y.
1866. Cooper, J. F., M.D., 42 N. Diamond St., Allegheny City, Pa.
1884. Cooper, William D., M.D., Wayne, Mich.
1874. Corbin, John L., M.D., Athens, Pa.
1888. Cornell, Albert B., M.D., Kalamazoo, Mich.
1873. Cossart, A. B., M.D., 1421 Lexington Avenue, New York.
1877. Couch, Asa S., M.D., Fredonia, N. Y.
1876. Couch, Louis B., M.D., Nyack, N. Y.
1883. Cowl, Walter Y., M.D., 310 W. 45th Street, New York.
1875. Cowperthwaite, Allen C., M.D., Iowa City, Iowa.
1878. Cranch, Edward, M.D., Erie, Pa.
1886. Crandall, Edward L., M.D., Troy, N. Y.
1874. Crank, C. D., M.D., 106 Auburn Avenue, Cincinnati, O.
1883. Crawford, Alex. K., M.D., 70 State Street, Chicago, Ill.
1883. Crawford, John H., M.D., 136 W. 8th Street, Cincinnati, O.
1885. Crippen, H. H., M.D., San Diego, Cal.
1885. Crosby, George W., M.D., Atlantic City, N. J.

1869. Cross, Hiram B., M.D., 21 Seavern's Avenue, Jamaica Plain, Boston, Mass.
1869. Cross, William P., M.D., 581 Broadway, South Boston, Mass.
1887. Crowley, Addie B., M.D., Geneva, N. Y.
1888. Crumpton, Margaret L., M.D., 26 Sherman Avenue, Allegheny, Pa.
1886. Culver, Mrs. Jane Kendrick, M.D., 698 Tremont Street, Boston, Mass.
1881. Cummings, M. Louisa, M.D., 83 Waltham St., Boston, Mass.
1867. Currier, C. B., M.D., 921½ Geary Street, San Francisco, Cal.
1883. Curtis, Elliott D., M.D., Woodland, Cal.
1867. Cushing, Alvin M., M.D., 175 State Street, Springfield, Mass.
1879. Custis, J. B. G., M.D., 110 E. Capitol St., Washington, D. C.
1869. Cutler, William C., M.D., 10 Everett Avenue, Chelsea, Mass.

1866. Dake, B. F., M.D., 815 Penn Avenue, Pittsburgh, Pa.
1881. Dake, Charles, M.D., Hot Springs, Ark.
1887. Dake, Frank B., M.D., Nashville, Tenn.
1877. Dake, Walter M., M.D., 29 N. Vine Street, Nashville, Tenn.
1872. Dake, William C., M.D., 29 N. Vine Street, Nashville, Tenn.
1879. Danforth, L. L., M.D., 149 W. 44th Street, New York.
1870. Danforth, Willis, M.D., 425 Milwaukee St., Milwaukee, Wis.
1874. Darling, Henry H., M.D., Keene, N. H.
1886. Darling, William W., M.D., Newport, Sullivan Co., N. H.
1883. Davis, E. Everett, M.D., 4321 Aspen St., Philadelphia, Pa.
1875. Davis, Fielding L., M.D., Evansville, Ind.
1878. Davis, John E. L., M.D., Nyack, N. Y.
1868. Dayfoot, Herbert M., M.D., 41 Sophia St., Rochester, N. Y.
1887. Deady, Charles, M.D., 11 E. 29th Street, New York.
1881. Dean, Edward W., M.D., Braddock, Pa.
1869. De Derkey, F. F., M.D., 2418 California Street, San Francisco, Cal.
1888. Defendorf, John J., M.D., Williamston, Mich.
1881. Demarest, John H., M.D., 1969 Madison Avenue, New York.
1869. Dennis, L., M.D., 30 Central Avenue, Newark, N. J.
1875. Deschere, Martin, M.D., 3 E. 43d Street, New York.
1884. Dickinson, Wilmot H., M.D., Des Moines, Iowa.
1883. Dillow, George Morris, M.D., 102 W. 43d Street, New York.
1887. Dills, Malcolm, M.D., Carlisle, Ky.
1878. Dinsmore, Samuel W. S., M.D., Sharpsburg, Pa.

1887. Docking, Thomas, M.D., 1528 E Street, San Diego, Cal.
1883. Dods, A. Wilson, M.D., Silver Creek, N. Y.
1880. Donaldson, Samuel J., M.D., 72 Madison Ave., New York.
1872. Doughty, Francis E., M.D., 512 Madison Ave., New York.
1881. Douglass, M. E., M.D., Danville, Va.
1887. Dowling, George B., M.D., Orange, N. J.
1867. Dowling, John W., M.D., 6 E. 43d St., New York.
1887. Dowling, John W., Jr., M.D., 152 W. 49th St., New York.
1882. Downey, F. Edgar, M.D., Clinton, Ill.
1871. Drake, Olin M., M.D., Ellsworth, Maine.
1869. Dudley, Pemberton, M.D., S. W. corner 15th and Master Streets, Philadelphia, Pa.
1881. Dunlevy, Suzetta E., M.D., 41 Sidney Place, Brooklyn, N. Y.
1886. Dunning, Thomas S., M.D., 1328 N. 15th St., Philada., Pa.
1884. Du Four, William Morgan, M.D., Williamsport, Pa.
Duncan, T. C., M.D., 102 State Street, Chicago, Ill.

1866. Earhart, J. R., M.D., 1904 Arch Street, Philadelphia, Pa.
1881. Eastman, Arthur M., M.D., St. Paul, Minn.
1877. Eaton, J. Albro, M.D., 94 Taylor Street, Brooklyn, N. Y.
1880. Eaton, Morton Monroe, M.D., Walnut Hills, Cincinnati, Ohio.
1876. Eckel, John N., M.D., 324 Geary Street, San Francisco, Cal.
1874. Edmonds, William A., M.D., 2924 Washington Avenue, St. Louis, Mo.
1881. Edmundson, Walter F., M.D., 375 Fifth Ave., Pittsburgh, Pa.
1872. Edson, Susan A., M.D., 1308 I St., N. W., Washington, D. C.
1885. Ehinger, George E., M.D., Keokuk, Iowa.
1869. Elliott, Joseph B., M.D., 493 Clinton Ave., Brooklyn, N. Y.
1882. Enos, Charles W., M.D., Jerseyville, Ill.
1873. Ensign, Jennie, M.D., 229 W. 42d Street, New York.
1867. Ermentraut, John P., M.D., 261 E. 4th Street, New York.
1874. Evans, Albert J., M.D., Lockport, N. Y.
1875. Everett, Ambrose S, M.D., 1646 Tremont St., Denver, Col.

1871. Fager, Charles B., M.D., 120 Walnut St., Harrisburg, Pa.
1882. Fahnestock, Joseph C., M.D., Piqua, O.
1887. Faust, Louis, M.D., Schenectady, N. Y.
1887. Fay, Charlotte H., M.D., Springfield, Mass.
1886. Felch, Albert H., M.D., 2656 Colfax Ave, Minneapolis, Minn.
1867. Fellows, H. Barton, M.D., 2969 Indiana Ave., Chicago, Ill.

1868. Finch, Edward W., M.D., New Rochelle, N. Y.
1888. Finney, Everett B., M.D., Philadelphia, Pa.
1873. Fisher, A. Leroy, M.D., Elkhart, Ind.
1884. Fisher, Charles E., M.D., Austin, Tex.
1867. Fiske, Wm. M. L., M.D., 484 Bedford Ave., Brooklyn, N.Y.
1869. Flanders, David P., M.D., Belfast, Me.
1879. Flanders, Martha J., M.D., Lynn, Mass.
1884. Fleming, Richard K., M.D., 6219 Station St., Pittsburgh, Pa.
1870. Flowers, J. R., M.D., Columbus, O.
1874. Forbes, George F., M.D., West Brookfield, Mass.
1881. Foss, David, M.D., Newburyport, Mass.
1880. Foster, Richard N., M.D., 10 Warren Ave., Chicago, Ill.
1867. Foster, William D., M.D., Kansas City, Mo.
1888. Fowler, Dewitt C., M.D., Aberdeen, D. T.
1887. Freeman, Elisha R., M.D., Wapakoneta, Ohio.
1886. Freer, Jas. A., M.D., 924 New York Ave., Washington, D.C.
1875. French, Hayes C., M.D., 114 Geary St., San Francisco, Cal.
1885. Fuller, Charles Gordon, M.D., 38 Central Music Hall, Chicago, Ill.
1886. Fulton, Fred. Samuel, M.D., 121 E. 70th St., New York.
1874. Fulton, Henry W., M.D., 5949 Penn Ave., Pittsburgh, Pa.

1886. Gale, Charles A., M.D., Rutland, Vt.
1871. Garberich, E. W., M.D., Des Moines, Iowa.
1884. Gardner, Franklin A., M.D., 1016 14th Street, N. W., Washington, D. C.
1869. Gause, Owen B., M.D., Aiken, S. C.
1885. Gee, William S., M.D., Hyde Park, Ill.
1881. Geiser, S. R., M.D., 303 Baymiller Street, Cincinnati, O.
1879. Gifford, W. B., M.D., Attica, N. Y.
1869. Gifford, Gilbert L., M.D., Hamilton, N. Y.
1888. Gilbert, Chas. B., M.D., 1011 H St. N.W., Washington, D.C.
1882. Gilman, John E., M.D., 455 W. Washington Street, Chicago, Ill.
1880. Given, Adam, M.D., 1403 W. Jefferson St., Louisville, Ky.
1887. Gooding, E. Jeanette, M.D., 223 W. Springfield Street, Boston, Mass.
1887. Goodno, William C., M.D., 4003 Chestnut Street, Philadelphia, Pa.

1870. Gordon, George A., M.D., Sandusky, O.
1876. Gordon, Peter A., M.D., Flemingsburg, Ky.
1883. Gorham, George Elmer, M.D., 160 Hamilton Street, Albany, N. Y.
*1870. Gottschalck, William von, M.D., 243 Westminster Street, Providence, R. I.
1885. Gottschalck, William von, Jr., M.D., Central Falls, R. I.
1886. Grady, Mary E., M.D., N.E. cor. 18th and Green Streets, Philadelphia, Pa.
1869. Gramm, Gustavus E., M.D., Hoyt, Pa.
1869. Graves, S. P., Saco, Me.
1881. Green, Charles L., M.D., 77 Matthewson Street, Providence, R. I.
1882. Green, William E., M.D., Little Rock, Ark.
1871. Greenleaf, John T., M.D., Owego, N. Y.
1874. Gregory, Edward P., M.D., Waterbury, Conn.
1876. Griffin, John F., M.D., Plainfield, N. J.
1881. Griffith, Anna E., M.D., 501 N. Fourth Street, Camden, N. J.
1878. Griveaud, E. A., M.D., 1402 Olive Street, St. Louis, Mo.
1874. Grosvenor, Lemuel C., M.D., 185 Lincoln Ave., Chicago, Ill.
1883. Gross, James Eldredge, M.D., 48 Madison St., Chicago, Ill.
1884. Grove, David Brainard, M.D., Hanover, Pa.
1875. Guernsey, Joseph C., M.D., 1923 Chestnut Street, Philadelphia, Pa.
1874. Guernsey, W. N., M.D., 27 W. Fifty-second St., New York.
1867. Gumpert, B. B., M.D., 840 Franklin Street, Philadelphia, Pa.

1887. Halbert, Homer V., M.D., 2400 Prairie Ave., Chicago, Ill.
1865. Hale, Edwin M., M.D., 65 Twenty-second St., Chicago, Ill.
1873. Hall, E. M., M.D., Fredericktown, O.
1874. Hall, Robert, M.D., Providence, R. I.
1887. Hanson, William Green, M.D., Everett, Mass.
1886. Halsey, Frederick W., M.D., 544 Columbus Avenue, Boston, Mass.
1882. Harris, W. John, M.D., 3047 Easton Avenue, St. Louis, Mo.
1888. Hart, Frank O., M.D., West Unity, Ohio.
1879. Hartshorn, D. W., M.D., 102 Garfield Place, Cincinnati, O.

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* Deceased since the Session of 1888.

1887. Harvey, Austin I., M.D., Newport, Me.
1875. Hasbrouck, Everett, M.D., 369 Ninth St., Brooklyn, N. Y.
1887. Hasbrouck, Sayer, M.D., Providence, R. I.
1881. Hassler, William A., M.D., Allentown, Pa.
1878. Hastings, Caroline E., M.D., 145 W. Concord Street, Boston, Mass.
1879. Hawkes, William J., M.D., Central Music Hall, Chicago, Ill.
1865. Haynes, J. R., M.D., 120 N. Meridian St., Indianapolis, Ind.
1869. Hayward, Joseph W., M.D., Taunton, Mass.
1884. Hazard, Theodore Lincoln, M.D., Anamosa, Iowa.
1880. Heath, James De Witt, M.D., Merrill, Wis.
1888. Heberton, William W., M.D., South Orange, N. J.
1869. Hedges, S. P., M.D., Central Music Hall, Chicago, Ill.
1887. Heilner, Herbert Franklin, M.D., 42 W. Forsyth Street, Atlanta, Ga.
1887. Helmuth, William Tod, Jr., M.D., 299 Madison Avenue, New York.
1867. Hemenway, Horace P., M.D., Somerville, Mass.
1879. Henderson, Sarah A., M.D., Sandusky, Ohio.
1874. Herron, Charles D., M.D., 3505 Butler Street, Pittsburgh, Pa.
1887. Hershberger, Joseph P., M.D., Lancaster, O.
1885. Hicks, Susan M., M.D., Atlanta, Ga.
1871. Higbee, Chester G., M.D., St. Paul, Minn.
1867. Hill, Robert L., M.D., P.O. Box 373, Oakland, Cal.
1876. Hindman, David R., M.D., Marion, Ia.
1867. Hinds, W. H. W., M.D., Milford, N. H.
1873. Hitchcock, Dexter, M.D., Norwalk, Conn.
1879. Hoag, Clitus S., M.D., Bridgeport, Conn.
1876. Hobart, Henry M., M.D., 402 Centre Street, Chicago, Ill.
1887. Hobart, Wm. F., M.D., 402 Centre Street, Chicago, Ill.
1888. Hodge, John W., M.D., Niagara Falls, N. Y.
1880. Hofmann, Charles H., M.D., 808 Penn Ave., Pittsburgh, Pa.
1886. Hoffman, Jacob Oliver, M.D., Dillsburgh, Pa.
1884. Hoffman, Joseph R., M.D., Morristown, N. J.
1888. Holcombe, J. Randolph, M.D., 1327 Girard Ave., Philadelphia, Pa.
1879. Holden, A. W., M.D., 17 Elm Street, Glens Falls, N. Y.
1887. Holmes, Henry P., M.D., Lansingburg, N. Y.
1886. Holmes, Horace P., M.D., Sycamore, Ill.

1869. Holt, Edward B., M.D., Hildrith Building, Lowell, Mass.
1885. Hooker, Edward B., M.D., 253 Main St., Hartford, Conn.
1887. Hopkins, Stephen Worcester, M.D., Lynn, Mass.
1883. Horner, J. Richey, M.D., 107 Arch St., Allegheny, Pa.
1888. Horning, David W., M.D., Lake City, Minn.
1884. Hotchkiss, Isabella Scott, M.D., Riverside, Cook Co., Ill.
1888. Hough, Walter D., M.D., Niagara Falls, N. Y.
1867. Houghton, Henry C., M.D., 12 W. Thirty-ninth Street, New York.
1888. Houghton, Neidhard H., M.D., Boston, Mass.
1875. House, Robert B, M.D., Springfield, O.
1883. Howard, Erving Melville, M.D., 401 Linden Street, Camden, N. J.
1881. Howe, J. Morgan, M.D., 58 W. Forty-seventh Street, New York.
1888. Howell, Conrade A., M.D., Westerville, Ohio.
1883. Hoyt, Charles, M.D., Chillicothe, O.
1888. Humphrey, Frank M., M.D., Danielsonville, Conn.
1869. Humphrey, Otis M., M.D., 808 Sixth Avenue, Minneapolis, Minn.
1867. Hunt, Henry F., M.D., 511 Cooper Street, Camden, N. J.
1874. Hunt, Dwight B., M.D., 44 W. Twenty-ninth Street, New York.
1886. Hunt, M. P., M.D., Delaware, O.
1884. Hunter, Horatio M., M.D., Lowell, Mass.
1873. Hurd, Edwin H., M.D., 21 Sophia St., Rochester, N. Y.
1888. Hurd, S. Wright, M.D., Lockport, N. Y.
1872. Hutchins, H. S., M.D., Batavia, N. Y.

1887. Ivins, Horace F., M.D., 1319 Arch St., Philadelphia, Pa.

1876. Jackson, Edward R., M.D., Dubuque, Iowa.
1878. Jackson, W. L., M.D., 86 Dudley St., Boston, Mass.
1866. James, J. E., M.D., 1521 Arch Street, Philadelphia, Pa.
1867. Jayne, DeWitt C., M.D., Florida, N. Y.
1886. Jefferds, Henry Clarke, M.D., Bangor, Me.
1873. Jenney, William H., M.D., Kansas City, Mo.
1887. Jewell, Henry E, M.D., Nevada, Mo.
1887. Jewett, Joseph Waldo, M.D., New Haven, Conn.

1887. Jewitt, Edward H., M.D., Cleveland, O.
1876. Johnson, George H. T., M.D., Atchison, Kan.
1876. Johnson, Maria N., M.D., 1732 Green St., Philadelphia, Pa.
1870. Johnson, R. B., M.D., Ravenna, O.
1883. Johnson, Seymour A., M.D., Kalkaska, Mich.
1886. Johnson, Theodore M., M.D., West Pittston, Pa.
1874. Jones, Charles E., M.D., Albany, N. Y.
1873. Jones, Gaius J., M.D., 91 Public Square, Cleveland, O.
1867. Jones, Henry C., M.D., Mount Vernon, N. Y.
1886. Jones, Joseph, M.D., San Antonio, Texas.
1875. Jones, Leonidas M., M.D., Brooklyn, Mich.

1876. Kanouse, Abijah W., M.D., Appleton, Wis.
1884. Karsner, Daniel, M.D., 4830 Main Street, Germantown, Philadelphia, Pa.
1883. Keator, Bruce Smith, M.D., Asbury Park, N. J.
1888. Keegan, W. A., M.D., Rochester, N. Y.
1888. Keeney, J. Harvey, M.D., Oswego, N. Y.
1874. Keep, Caroline J. Yeomans, M.D., 310 W. Forty-fifth Street, New York.
1867. Keep, J. Lester, M.D., 460 Clinton Ave., Brooklyn, N. Y.
1881. Keim, Wm. H., M.D., 2015 Ridge Ave., Philadelphia, Pa.
1869. Keith, Theodore S., M.D., Newton, Mass.
1884. Keller, Francis, M.D. (Residence unknown.)
1881. Kennedy, Alonzo L., M.D., 136 Boylston Street, Boston, Mass.
1886. Kent, Maude, M.D., Walpole, Mass.
1878. Kershaw, J. Martine, M.D., 3500 Laclede Avenue, St. Louis, Mo.
1870. King, E. H., M.D., Denver, Col.
1888. King, William R., M.D., Washington, D. C.
1887. Kinne, Arthur B., M.D., Syracuse, N. Y.
1887. Kinne, Olin E., M.D., Syracuse, N. Y.
1869. Kinne, Theodore Y., M.D., Paterson, N. J.
1880. Kinyon, Claudius B., M.D., Rock Island, Ill.
1870. Kippax, John R., M.D., 3154 Indiana Ave., Chicago, Ill.
1879. Kirkland, William H., M.D., Massillon, Ohio.
1869. Kittinger, Leonard, M.D., 724 King St., Wilmington, Del.
1886. Kittinger, Leonard Armour, M.D., Wilmington, Del.

1871. Knerr, Calvin B., M.D., 1137 Spruce St., Philadelphia, Pa.
1887. Knight, Stephen H., M.D., 41 E. 12th St., New York, N. Y.
1888. Knox, Joseph H., M.D., Orono, Me.
1885. Korndœrfer, Augustus, M.D., 648 N. Twelfth St., Philadelphia, Pa.
1886. Kraft, Frank, M.D., Sylvania, Ohio.
1865. Krebs, Francis H., M.D., 42 Union Park, Boston, Mass.
1888. Krogstad, Henry, M.D., St. Paul, Minn.

1887. Laird, F. F., M.D., Utica, N. Y.
1874. Laird, William T., M.D., Watertown, N. Y.
1885. Lawshé, John Z., M.D., Atlanta, Ga.
1872. Lawton, C. H., M.D., S. E. corner Delaware Avenue and Washington Street, Wilmington, Del.
1882. Leavitt, Sheldon, M.D., 148 Thirty-seventh St., Chicago, Ill.
1888. Lee, John Mallory, M.D., 89 Plymouth Ave., Rochester, N. Y.
1888. Lee, Sarah Idella, M.D., 89 Plymouth Ave., Rochester, N.Y.
1883. Leeds, Charles, M.D., 189 Chestnut Street, Chelsea, Mass.
1882. Leonard, William E., M.D., Minneapolis, Minn.
1873. Leonard, W. H., M.D., Minneapolis, Minn.
1886. Le Seur, John Wesley, M.D., Batavia, Genesee Co., N. Y.
1888. Leseure, Oscar, M.D., 406 Cass Ave., Detroit, Mich.
1877. Lewis, F. Park, M.D., 188 Franklin St., Buffalo, N. Y.
1871. Lewis, Henry M., M.D., 171 Remsen St., Brooklyn, N. Y.
1880. Lewis, Joseph, M.D., 330 Hanover Street, Milwaukee, Wis.
1875. Lewis, Joseph C., M.D., 4536 Paul St., Philadelphia, Pa.
1886. Lilienthal, James Edward, M.D., 1316 Van Ness Avenue, San Francisco, Cal.
1867. Lilienthal S., M.D., 1316 Van Ness Avenue, San Francisco, Cal.
1887. Linn, A. M., M.D., Des Moines, Iowa.
1885. Linnell, E. H., M.D., 61 Broadway, Norwich, Conn.
1874. Linnell, Jonathan E., M.D., Norwich, Conn.
1886. Lippincott, Eldridge, M.D., Masonic Temple, Memphis, Tenn.
1881. Lowe, John N., M.D., Milford, N. J.
1885. Lowenthal, Lewis, M.D., Washington Heights, Ill.

1887. Ludlam, Reuben, Jr., M.D., 1823 Michigan Avenue, Chicago, Ill.
1884. Lukens, Joseph Paul, M.D., 813 Washington Street, Wilmington, Del.
1873. Lukens, M. B., M.D., 774 Doan Street, Cleveland, Ohio.
1870. Lungren, Samuel S., M.D., Hotel Madison, Toledo, Ohio.

1881. McClellan, David, M.D., West Hoboken, N. J.
1879. McClelland, John B., M.D., 411 Penn Ave., Pittsburgh, Pa.
1867. McClelland, J. H., M.D., 411 Penn Ave., Pittsburgh, Pa.
1884. McClelland, Robert Watson, M.D., 411 Penn Avenue, Pittsburgh, Pa.
1881. McClure, Eliza H. L., M.D., 811 N. Twentieth Street, Philadelphia, Pa.
1882. McConnell, Robert N., M.D., Upper Sandusky, Ohio.
1879. McCrea, Philip A , M.D., 160 Franklin St., Buffalo, N. Y.
1873. McDermott, Geo. C., M.D., 118 W. 7th St., Cincinnati, O.
1874. McDonald, Wm. O., M.D., 117 W. 44th St., New York.
1886. McDowell, Chas., M.D., 150 W. 11th St., New York, N. Y.
1871. McGeorge, Wallace, M.D., Woodbury, N. J.
1886. McLachlan, Daniel A., M.D., Ann Arbor, Mich.
1866. McMurray, Robert, M.D., 234 Second Ave., New York.
1868. Macfarlan, Malcolm, M.D., 1805 Chestnut Street, Philadelphia, Pa.
1887. Macomber, H. K., M.D., Pasadena, Cal.
1883. Manahan, Manning W., M.D., Atlanta, Ga.
1881. Mansfield, Job R., M.D., 4852 Main St., Philadelphia, Pa.
1871. Martin, Constantine H., M.D., Allentown, Pa.
1868. Martin, H. N., M.D., 1218 Walnut St., Philadelphia, Pa.
1886. Martin, John S., M.D., Muncie, Ind.
1878. Martin, W. J., M.D., 1712 Carson St., S. S., Pittsburgh, Pa.
1867. Mason, S. R., M.D., Devall's Bluff, Arkansas.
1881. Mathews, Mary D. Moss, M.D., 123 Broadway, Providence, R. I.
1880. Maxon, Joseph S., M.D., Walworth, Wis.
1887. Maycock, Burt J., M.D., Buffalo, N. Y.
1885. Mellus, Edward Lyndon, M.D., Worcester, Mass.
1871. Mercer, Robert P., M.D., Chester, Pa.
1876. Mercer, William M., M.D., Galveston, Texas.

1880. Merrick, Myra K., M.D., 363 Prospect St., Cleveland, O.
1871. Middleton, Caleb S., M.D., 1523 Girard Avenue, Philadelphia, Pa.
1869. Middleton, M. F.; M.D., Camden, N. J.
1887. Milbank, William E., M.D., Albany, N. Y.
1875. Miller, Christopher C., M.D., 512 Woodward Avenue, Detroit, Mich.
1884. Miller, Irving, M.D., 1207 E. Monument St., Baltimore, Md.
1883. Miller, John, M.D., 127 College Street, Buffalo, N. Y.
1888. Miller, Zachary T., M.D., Pittsburgh, Pa.
1887. Millsop, Sarah J., M.D., Bowling Green, Ky.
1888. Minard, Will. Frank, M.D., Burlington, Vt.
1888. Minton, Henry Brewster, M.D., 165 Joralemon Street, Brooklyn, N. Y.
1866. Mitchell, John J., M.D., Newburgh, N. Y.
1875. Mitchell, John M., M.D., 1222 Walnut St., Philadelphia, Pa.
1866. Mitchell, J. S., M.D., 2954 Michigan Avenue, Chicago, Ill.
1881. Moffat, Edgar V., M.D., 132 W. 44th Street, New York.
1881. Moffat, John L., M.D., 17 Schermerhorn St., Brooklyn, N.Y.
1867. Moffat, Reuben C., M.D., 17 Schermerhorn St., Brooklyn, N. Y.
1876. Mohr, Charles, M.D., 555 N. 16th St., Philadelphia, Pa.
1876. Monmonier, Julius L., M.D., 128 Green Ave., Brooklyn, N. Y.
1875. Moore, George W., M.D., Springfield, Ohio.
1867. Morgan, John C., M.D., 108 S. 17th St., Philadelphia, Pa.
1884. Morgan, Wm. L., M.D., 313 N. Eutaw St., Baltimore, Md.
1878. Morrill, Edwin C., M.D., Norwalk, Ohio.
1886. Morrill, Ezekiel, M.D., Concord, N. H.
1884. Morris, John W., M.D., Wheeling, W. Va.
1869. Morse, Martin V. B., M.D., Marblehead, Mass.
1867. Morse, Nathan R., M.D., Salem, Mass.
1872. Morse, Lucius D., M.D., 730 9th St., N. W., Washington, D.C.
1879. Mosher, Charles M., M.D., Easton, N. Y.
1869. Mosman, Nathan A., M.D., 350 Madison Ave., New York.
1880. Moss, Oscar B., M.D., 1115 Main St., Kansas City, Mo.
1887. Munson, Mary F., M.D., Los Angeles, Cal.
1885. Munson, Reginald, M.D., 1140 Connecticut Avenue, Washington, D. C.
1877. Murphy, Edmund A., M.D., 238 Camp St., New Orleans, La.

1886. Murray, Arthur S., M.D., Fair Haven, Vt.
1875. Murrell, William J., M.D., Mobile, Ala.
1881. Musits, Henry von, M.D., 1266 Lexington Ave., New York.

1867. Negendank, Augustus, M.D., 901 Washington Street, Wilmington, Del.
1872. Nichol, Thomas, M.D., 140 Mansfield St., Montreal, Canada.
1876. Nichols, Ammi S., M.D., Portland, Oregon.
1880. Nichols, Charles L., M.D., Worcester, Mass.
1876. Nichols, George, M.D., 306 Monroe St., Brooklyn, N. Y.
1886. Nickelson, W. H., M.D., A. D. Ripley Block, Adams, N. Y.
1887. Nordstrom, Cynthia Maria, M.D., Malden, Mass.
1887. Norton, Claude R., M.D., 532 N. 40th St., Philadelphia, Pa.
1872. Norton, George S., M.D., 154 W. 34th Street, New York.
1881. Nott, Frederick J., 522 Madison Avenue, New York, N. Y.
1888. Nottingham, John C., M.D., Bay City, Mich.

1882. Obetz, Henry L., M.D., 139 First Street, Detroit, Mich.
1872. Ockford, George M., M.D., East Short St., Lexington, Ky.
1884. Olin, Rollin C., M.D., 144 High St., W. Detroit, Mich.
1886. Olmstead, Louis J., M.D., Kansas City, Mo.
1883. Ormes, Francis D., M.D., Jamestown, N. Y.
1876. Ostrom, Homer I., M.D., 42 W. 48th Street, New York.
1865. Owens, Wm., M.D., corner 7th and John Sts., Cincinnati, O.
1878. Owens, Wm., Jr., M.D., cor. 7th and John Sts., Cincinnati, O.

1881. Packard, Horace, M.D., Hotel Chatham, Boston, Mass.
1868. Packard, Liberty D., M.D., 538 Broadway, S. Boston, Mass.
1886. Packer, Henry E., M.D., Barre, Vt.
1879. Paine, N. Emmons, M.D., Westborough, Mass.
1888. Palmer, Lyman R., M.D., 608½ Nicollet Ave., Minneapolis, Minn.
1881. Pardee, E. B., M.D., 218 W. 34th Street, New York.
1886. Pardee, Emily V., M.D., South Norwalk, Conn.
1881. Parkhurst, L. B., M.D., Northampton, Mass.
1883. Parsons, Anson, M.D., Springboro, Pa.
1888. Parsons, Edgar C., M.D., Meadville, Pa.
1879. Parsons, Katherine, M.D., 190 Prospect St., Cleveland, O.
1885. Parsons, Scott B., M.D., 1226 Washington Avenue, St. Louis, Mo.

1873. Patchen, George H., M.D., 41 E. 59th St., New York.
1867. Payne, Frederick W., M.D., Hotel Pelham, Boston, Mass.
1879. Payne, George H., M.D., 590 Tremont St., Boston, Mass.
1879. Payne, Mary A., M.D., 63 W. Newton St., Boston, Mass.
1886. Pearsall, John A., M.D., Saratoga Springs, N. Y.
1867. Pearsall, S. J., M.D., Saratoga Springs, N. Y.
1887. Pearsall, Wm. S., M.D., 128 W. 78th St., New York, N. Y.
1868. Pease, Giles M., M.D., 125 Turk St., San Francisco, Cal.
1879. Peck, George B., M.D., Providence, R. I.
1877. Penfield, Sophia, M.D., Danbury, Conn.
1870. Pennoyer, N. A., M.D., Kenosha, Wis.
1887. Percy, Frederick B., M.D., Brookline, Mass.
1887. Percy, George Emory, M.D., Salem, Mass.
1884. Perkins, C. W., M.D., Chester, Pa.
1881. Perkins, Nathaniel R., M.D., Winchendon, Mass.
1886. Perkins, Wesley B., M.D., Bridgton, Maine.
1872. Pettengill, Eliza F., M.D., 300 N. 10th St., Philadelphia, Pa.
1867. Phillips, Albert William, M.D., Birmingham, Conn.
1881. Phillips, Leslie A., M.D., 165 Boylston St., Boston, Mass.
1888. Pike, Lucy Johnson, M.D., Lynn, Mass.
1880. Pitcairn, Hugh, M.D., Harrisburg, Pa.
1885. Pomeroy, Harlan N., M.D., 526 Prospect St., Cleveland, O.
1876. Pope, Gustavus W., M.D., 1109 14th St., Washington, D. C.
1887. Pope, Willis G., M.D., Keeseville, N. Y.
1887. Porter, Eugene H., M.D., 161 W. 71st St., New York, N. Y.
1880. Porter, Philip, M.D., 33 Adams Ave., E. Detroit, Mich.
1867. Poulson, P. W., M.D., 1504 Market St., San Francisco, Cal.
1888. Powell, William C., M.D., Bryn Mawr, Pa.
1874. Pratt, E. H., M.D., Central Music Hall, Chicago, Ill.
1867. Pratt, Leonard, M.D., Wheaton, Ill.
1867. Price, Elias C., M.D., 953 Madison Ave., Baltimore, Md.
1876. Price, Emmor H., M.D., Chattanooga, Tenn.
1886. Printy, James Anthony, M.D., 598 Lincoln Ave., Chicago, Ill.
1888. Pulford, Alfred, M.D., Ansonia, Conn.
1886. Putnam, T. J., M.D., North Adams, Mass.
1886. Putnam, Warren E., M.D., Hoosick, N. Y.
1887. Putnam, William B., M.D., Hoosick Falls, N. Y.

1883. Quinby, Edgar C., M.D., Titusville, Pa.

1881. Rand, Nehemiah W., M.D., Monson, Mass.
1885. Rand, John Prentice, M.D., Monson, Mass.
1881. Rankin, Egbert G., M.D., 526 Fifth Ave., New York, N. Y.
1865. Rankin, John S., M.D., 308 Grant Street, Pittsburgh, Pa.
1867. Raue, Charles G., M.D., 121 N. Tenth St., Philadelphia, Pa.
1882. Ray, William R., M.D., 133 Collins Street, Melbourne, Victoria, Australia.
1881. Reading, J. Herbert, M.D., 1811 Green St., Philadelphia, Pa.
1887. Reading, L. Willard, M.D., 1519 Arch St., Philadelphia, Pa.
1888. Reading, Thomas, M.D., Pittsburgh, Pa.
1883. Reddish, A. W., M.D., Sidney, Ohio.
1887. Reed, Joseph O., M.D., Middletown, N. Y.
1885. Reed, Robert G., M.D., Woonsocket, R. I.
1885. Reed, Thomas E., M.D., Middletown, Ohio.
1888. Reeves, Joseph M., M.D., 1609 Mt. Vernon Street, Philadelphia, Pa.
1883. Renninger, John S., M.D., Marshall, Minn.
1883. Reynolds, Belle L., M.D., 1823 Michigan Ave., Chicago, Ill.
1886. Richards, George E., M.D., Platteville, Wis.
1887. Richards, L. B., M.D., Oswego, N. Y.
1872. Richardson, B. M., M.D., 200 W. 57th Street, New York.
1886. Richardson, Frank C., M.D., 1 Saratoga Place, East Boston, Mass.
1876. Richardson, William C., M.D., 18 Turner Building, St. Louis, Mo.
1883. Ridge, Jonathan T., M.D., 1219 N. Sixth Street, Philadelphia, Pa.
1887 Riggs, D. H., M.D., 1012 Massachusetts Avenue, Washington, D. C.
1887. Rile, J. Harmer, M.D., Wilmington, Del.
1881. Roberts, George F., M.D., 610 Nicollet Avenue, Minneapolis, Minn.
1881. Robinson, Horatio, Jr., M.D., Auburn, N. Y.
1887. Robinson, James B., M.D., 284 Meridian St., Boston, Mass.
1875. Robinson, John T., M.D., Warsaw, Ky.
1866. Robinson, S. A., M.D., West New Brighton, N. Y.
1888. Robinson, Wilhelmus B., M.D., Easthampton, Mass.
1884. Robson, John W., M.D., Sylvan Ave., Pittsburgh, Pa.
1881. Rockwell, John A., M.D., Norwich, Conn.

1886. Rollins, Charlotte A., M.D., 418 Meridian St., East Boston, Mass.
1882. Rosenberger, Abraham S., M.D., Covington, Ohio.
1883. Ross, George A., M.D., Fort Wayne, Ind.
1886. Rounsevel, C. Sedgwick, M.D., Nashua, N. H.
1875. Runnels, Moses T., M.D., Kansas City, Mo.
1873. Runnels, O. S., M.D., Indianapolis, Ind.
1887. Runnels, Sollis, M.D., Indianapolis, Ind.
1865. Rush, R. B., M.D., 120 Main Street, Salem, Ohio.
1880. Rushmore, Edward, M.D., Plainfield, N. J.
1886. Russell, Clara L., M.D., 506 N. Sixth St., St. Louis, Mo.
1880. Russegue, Henry E., M.D., Hartford, Conn.

1869. Sage, William H., M.D., New Haven, Conn.
1867. Sanford, Charles E., M.D., Bridgeport, Conn.
1871. Sartain, Harriet J., M.D., 212 West Logan Square, Philadelphia, Pa.
1867. Sawin, Isaac W., M.D., 280 Broadway, Providence, R. I.
1878. Sawyer, Alfred I., M.D., Monroe, Mich.
1867. Scales, Edward P., M.D., Newton, Mass.
1873. Scheurer, E. M., M.D., Clearfield, Pa.
1882. Schley, Edward B., M.D., Columbus, Ga.
1875. Schley, James Montford, M.D., 1 E. 42d Street, New York.
1883. Schley, Philip T., M.D., 522 E. 86th Street, New York City.
1881. Schmitt, Julius, M.D., 42 N. St. Paul Street, Rochester, N. Y.
1873. Schmucker, Elhanan Z., M.D., Reading, Pa.
1868. Schneider, N., M.D., 791 Prospect Street, Cleveland, Ohio.
1881. Schreiner, Emma T., M.D., 123 W. Chelten Ave., Philadelphia, Pa.
1872. Scott, Chester W., M.D., Lawrence, Mass.
1886. Scott, William H., M.D., 8 E. 41st Street, New York, N.Y.
1869. Seip, C. P., M.D., 636 Penn Ave., Pittsburgh, Pa.
1876. Seward, John L., M.D., Orange, N. J.
1879. Shannon, Samuel F., M.D., Sewickley, Pa.
1867. Shearer, Thomas, M.D., 345 N. Charles St., Baltimore, Md.
1882. Shears, George F., M.D., 3130 Indiana Ave., Chicago, Ill.
1870. Sheldon, J. W., M.D., 76 Warren Street, Syracuse, N. Y.
1886. Shelton, Geo. G., M.D., 251 Madison Ave., New York, N. Y.

1881. Shenstone, B. C., M.D., 226 Cumberland Street, Brooklyn, N. Y.
1866. Shepard, A., M.D., Glendale, Ohio.
1871. Shepherd, James S., M.D., Petaluma, Cal.
1875. Sherman, Lewis, M.D., 171 Wisconsin Street, Milwaukee, Wis.
1879. Sherman, Sarah E., M.D., Salem, Mass.
1882. Sherwood, H. A., M.D., Warren, Ohio.
1871. Shivers, Bowman H., M.D., Haddonfield, N. J.
1884. Short, Susan D., M.D., 42 Bowdoin St., Boston, Mass.
1881. Simmons, Daniel, M.D., 97 Lee Avenue, Brooklyn, N. Y.
1888. Simmons, Silas S., M.D., Susquehanna, Pa.
1881. Simon, Samuel H., M.D., P. O. Box 79, Harrisburg, Pa.
1883. Slaught, James E., M.D., Warsaw, N. Y.
1879. Slocum, Royal, M.D., Easton, N. Y.
1876. Slough, Frank J., M.D., Allentown, Pa.
1888. Slough, William C. J., M.D., Emaus, Pa.
1873. Smith, Chester, M.D., Portland, Mich.
1888. Smith, Ernest B., M.D., Union City, Pa.
1879. Smith, J. Edwards, M.D., 151 Windsor Avenue, Cleveland, Ohio.
1869. Smith, J. Heber, M.D., 279 Dartmouth St., Boston, Mass.
1882. Smith, Julia H., M.D., 521 Dearborn Ave., Chicago, Ill.
1887. Smith, Melvin D., M.D., Middlebury, Vt.
1885. Smith, Norman Pitt, M.D., Paris, Ill.
1886. Smith, Sarah N., M.D., 135 W. 34th St., New York, N. Y.
1869. Smith, St. Clair, M.D., 8 W. 38th St., New York, N. Y.
1887. Snyder, Edward E., M.D., Binghamton, N. Y.
1887. Southgate, Robert Wilson, M.D., Rockland, Mass.
1871. Southwick, Augustus B., M.D., Rome, N. Y.
1888. Southwick, George R., M.D., Boston, Mass.
1869. Spalding, Henry E., M.D., Hingham, Mass.
1877. Speakman, Rachel T., M.D., Wellesley, Mass.
1875. Spinney, Andrew B., M.D., Ypsilanti, Mich.
1887. Spoor, David E., M.D., Medina, N. Y.
1882. Spreng, T. F. H., M.D., Buchanan, Mich.
1886. Stearns, Melvin J., M.D., Massena, N. Y.
1888. Stewart, Thomas M., M.D., Cincinnati, Ohio.
1871. Stiles, James E., M.D., Lambertville, N. J.
1879. Stone, Martha M., M.D., 104 Prospect St., Cleveland, O.

1887. Stone, Waldo H., M.D., 133 Orms St., Providence, R. I.
1880. Storke, Eugene F., M.D., 132 Grand Avenue, Milwaukee, Wis.
1882. Stout, Henry R., M.D., Jacksonville, Fla.
1882. Stover, William H., M.D., Tiffin, Ohio.
1871. Streets, Jacob G., M.D., Bridgeton, N. J.
1880. Strong, Thomas M., M.D., Ward's Island, N. Y.
1888. Strunk, Edward P., M.D., Brewster, N. Y.
1883. Stumpf, Daniel B., M.D., 631 Ellicott St., Buffalo, N. Y.
1881. Sturtevant, Charles, M.D., Hyde Park, Mass.
1887. Sturtevant, L. P., M.D., Conneaut, Ohio.
1881. Sumner, Charles R., M.D., Rochester, N. Y.
1887. Sutherland, John Preston, M.D., 10 Park Square, Boston, Mass.
1880. Swain, Mary L., M.D., 474 Columbus Ave., Boston, Mass.
1887. Swalm, Thomas W., M.D., Pottsville, Pa.
1879. Swartz, J. Ross, M.D., Harrisburg, Pa.
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